


TEST REPORT

 CTK Co., Ltd. <small>The Power Leader of Global Regulatory Certification</small>	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2021-02083 Page (1) / (25) pages	
---	--	---	--

1. Applicant

- Name.....: Hanwha Techwin Co., Ltd.
- Address: Hanwha Techwin R&D center, 6 Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13488 KOREA
- Date of Receipt: 2021-04-19

2. Manufacturer

- 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



3. Test sample / Model : NETWORK CAMERA / QNP-6320H

4. Date(s) of test : 2021-04-24 to 2021-04-30

5. Test Standard (Method) used... : NEMA 250-2014
Enclosures for Electrical Equipment (1000 Volts Maximum)

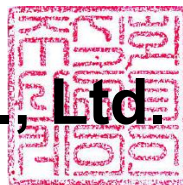
6. Results : Pass


The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
This report shall not be reproduced except in full without the written approval of CTK


Approval	Tested by: Min-Gi Mun  (Signature)	Technical Manager: WonHyeon Choi  (Signature)
----------	--	---

2021-06-07

CTK Co., Ltd.




 CTK Co., Ltd. <small>The Power Leader of Global Regulatory Certification</small>	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2021-02083 Page (2) / (25) pages	
---	--	--	--

Test item description	NETWORK CAMERA
Trade Mark	
Manufacturer	No.11 Weiliu Rd, Micro-Electronic Industrial Park, TEDA, Tianjin, 300385, People's Republic of China
Model/Type reference	QNP-6320H
Ratings	Electrical QNP-6320H – PoE(DC 53 V, 0.44 A) QNP-6250H – PoE(DC 53 V, 0.44 A) Dimension : Ø 204.3 mm, Ø 146.4 mm, Ø 4 mm by 12.6 * 6

List of Attachments (including a total number of pages in each attachment): Attachment 1: 12-15 pages (Construction Diagram including installation method) Attachment 2: 16-21 pages (Parts List) Attachment 3: 22-25 pages (photographs)
--

Summary of testing:	
Tests performed (name of test and test clause): Clause 5.7(Hose Down Test)	Testing location: CTK Co., Ltd. (Ho-Dong) 113, Yejik-ro Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF

Copy of marking plate: The artwork above may be only a draft. <div data-bbox="604 1288 1125 1621" data-label="Image"> </div> <div data-bbox="604 1632 1125 1968" data-label="Image"> </div>

 CTK Co., Ltd. <small>The Prime Leader of Global Regulatory Certification</small>	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2021-02083 Page (3) / (25) pages	
---	--	--	--

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 evaluated to the test object :	N/E

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 <input type="checkbox"/> comma / <input checked="" type="checkbox"/> 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 TECHWIN SECURITY VIETNAM CO.,LTD Lot O-2, Que Vo Industrial Zone extended area, Nam Son commune, 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)				
General product information: Applied NEMA Rating : 4X Model QNP-6320H is basic model which was tested.				
<table border="1" data-bbox="301 1525 1442 1639"> <tr> <td>Basic Model</td> <td>QNP-6320H</td> </tr> <tr> <td>Series model</td> <td>QNP-6250H</td> </tr> </table>	Basic Model	QNP-6320H	Series model	QNP-6250H
Basic Model	QNP-6320H			
Series model	QNP-6250H			
Model differences: The model differences are only for function not related to the quality of enclosure integrity.				

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	<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


 CTK Co., Ltd. <small>The Power Leader of Global Regulatory Certification</small>	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2021-02083 Page (7) / (25) pages	
---	--	--	--

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
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		
----------	----------------	--	--

 CTK Co., Ltd. <small>The Power Leader of Global Regulatory Compliance</small>	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2021-02083 Page (8) / (25) pages	
--	--	--	--


NEMA 250-2014			
Clause	Requirement + Test	Result - Remark	Verdict
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
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

 <p>CTK Co., Ltd. The Prime Leader of Global Regulatory Certification</p>	<p>CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501</p>	<p>REPORT No.: CTK-2021-02083 Page (9) / (25) pages</p>	
---	---	---	--

NEMA 250-2014			
Clause	Requirement + Test	Result - Remark	Verdict
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

 CTK Co., Ltd. <small>The Prime Leader of Global Regulatory Certification</small>	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2021-02083 Page (10) / (25) pages	
---	--	--	--

NEMA 250-2014			
Clause	Requirement + Test	Result - Remark	Verdict

Test Information

	Hose Down Test : Clause 5.7	P
--	------------------------------------	----------

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).

Sample Dimension(Ø 204.3 mm, Ø 146.4 mm, Ø 4 mm by 12.6 * 6)


Test Duration = 71 secs

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

Test Results

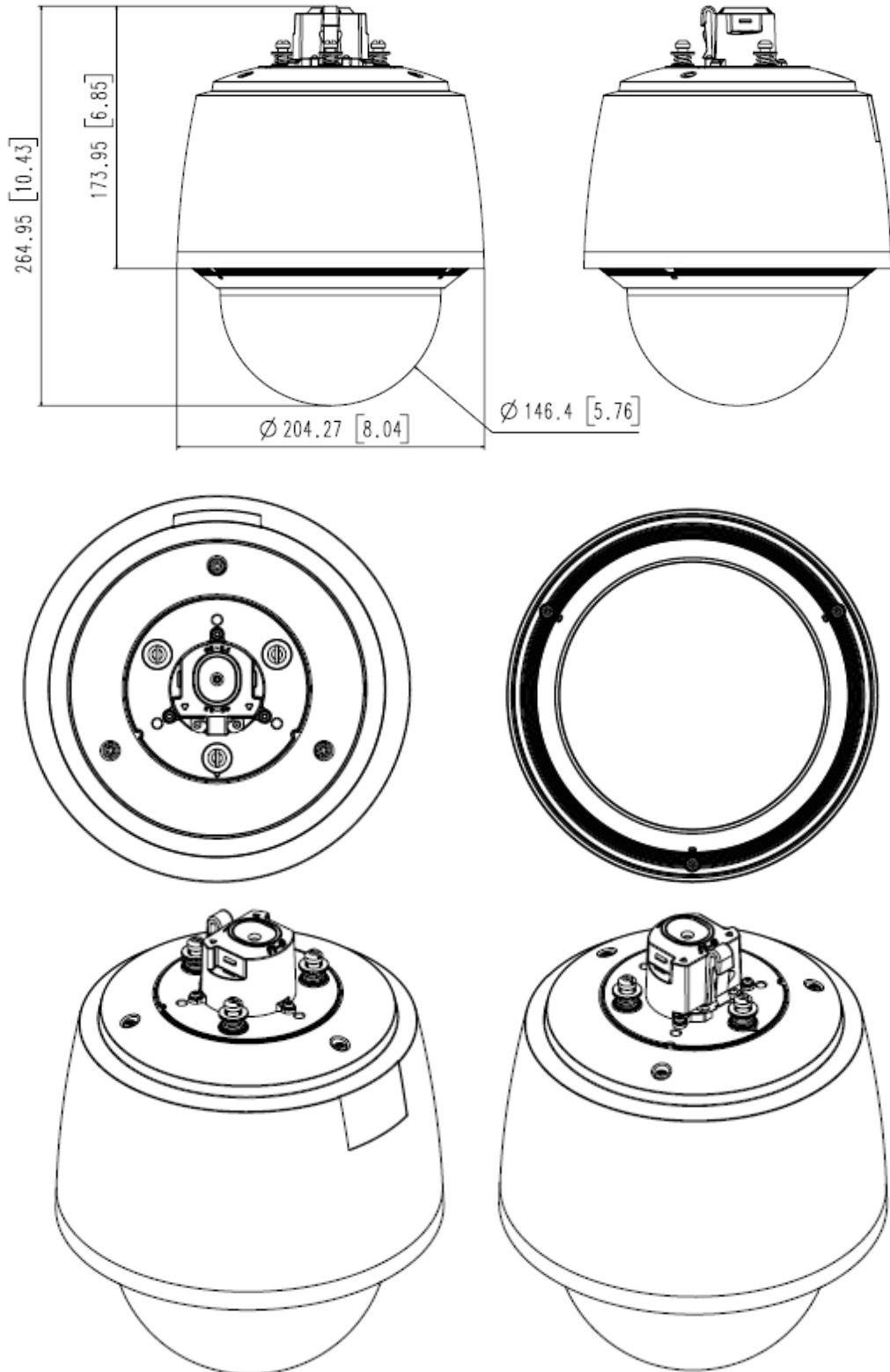
Sample No (Model)	Water Flow	Presence of water inside	Result
QNP-6320H	240 LPM	No	Pass

 CTK Co., Ltd. <small>The Prime Leader of Global Regulatory Certification</small>	CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2021-02083 Page (11) / (25) pages	
---	--	--	--

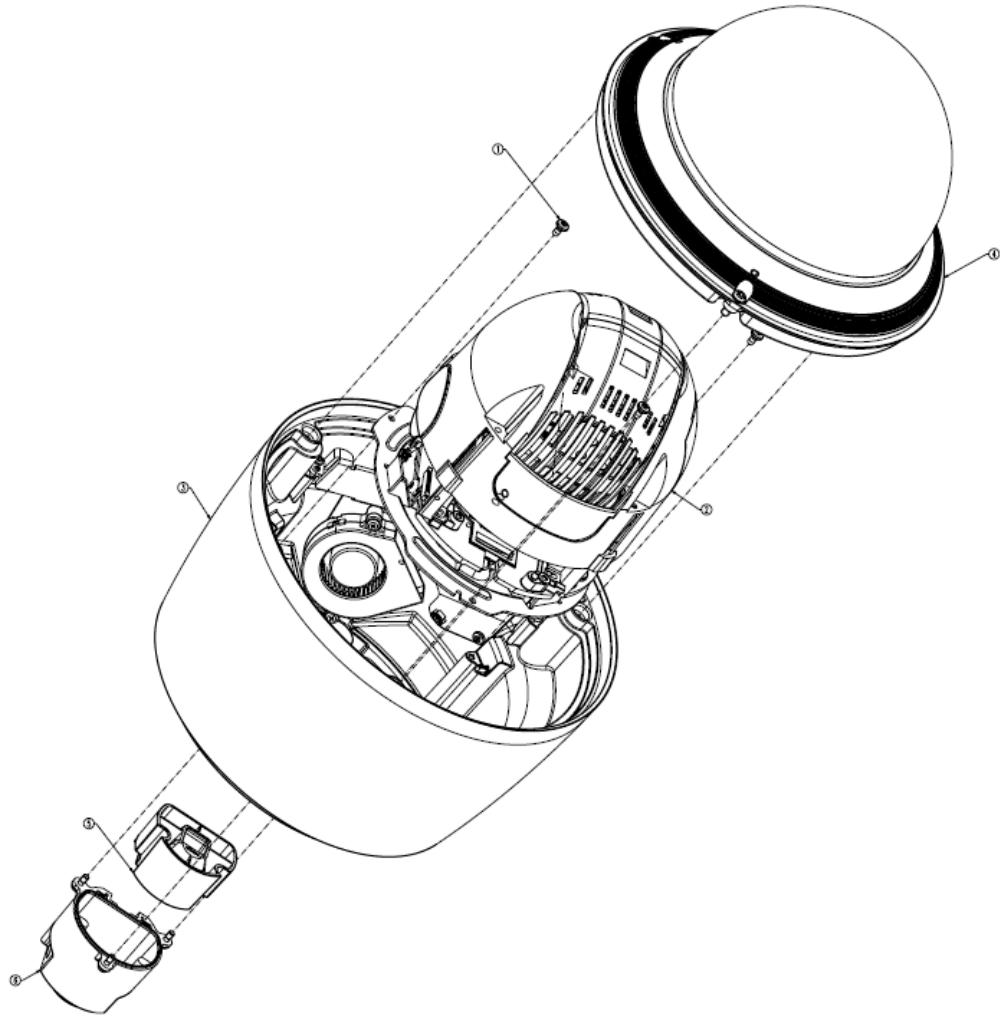
List of test equipment used:

Instr. Code	Instrument Type	Range Used	Mfr./Model	Calibration Date	
				Last	Due
S3-IP18	25.4mm Nozzle	25.4 mm	CTK/S3-IP18	-	Checked by calliper below before using
S1-SW2	Stop Watch	0.01 s	CASIO/ NONE	2021-03-19	2023-03-03
C-S1-D09	Steel Measuring Tape	5 m	KOMELON/KMC-74N	2019-07-22	2021-07-02
S3-IP23	Water flow meter	250LPM	Nuri tech/ Z-6504	2020-07-22	2021-07-01
C-S1-D02	DIGITAL VERNIER CALIPER	150 mm	MITUTOYO/150 mm	2020-09-19	2021-08-24

Attachment 1 – Construction Diagram and installation method

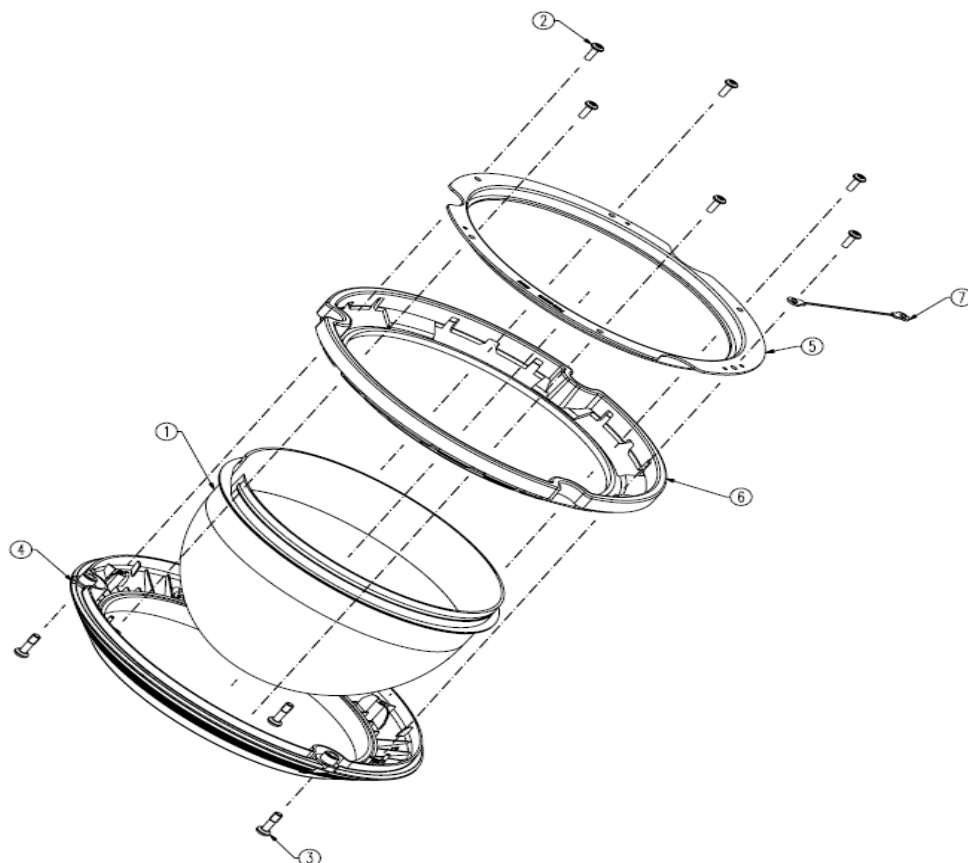


Attachment 1 – Construction Diagram and installation method



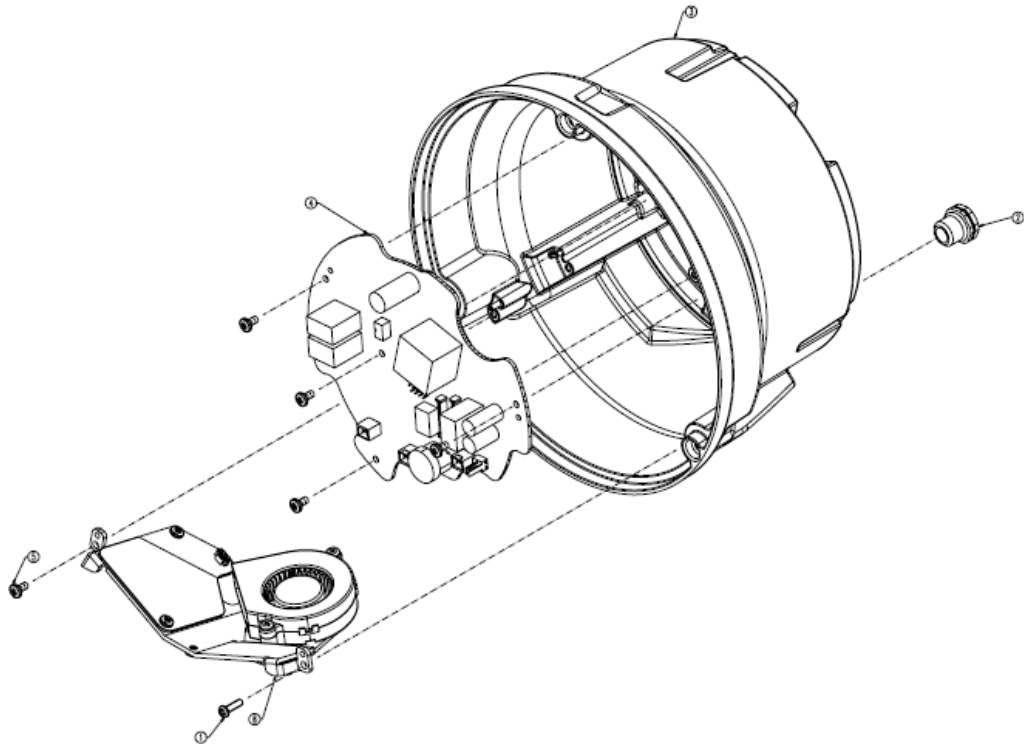
NO.	PART NO.	PART NAME	Spec	Q'TY
1	Z6001053 501A	SCREW_MACHINE_BH_M3_L6_ WHITE		20
2	79618	Assy Mecha QNP-6320H		1
3	79622	ASSY BODY QNP-6320H		1
4	77676	Assy Cover Dome_QNP-6320H		1
5	FC15-007 852A	Cover guide for RJ45 jack_XNP-xx00RW		1
6	71176	Assy cover bush_PNP-Axx00RW		1

Attachment 1 – Construction Diagram and installation method



NO.	PART NO.	PART NAME	Spec	Q'TY
1	FC15-001 430A	COVER-DOME-SNP5300H		1
2	Z6003013 801A	SCREW_TAPTITE_BH_M3_L8_ BLACK		6
3	FC18-004 000A	SCREW_MACHINE_PH_M4_L12 _ORIGINALCOLOR		3
4	FC15-008 135A	COVER-HOUSING QNP-6320H		1
5	FC09-002 559A	BRACKET-DOME ; SECC , SNP53 00H		1
6	HP07-000 127A	GASKET-DOME , SNP5300H		1
7	Z6909025 601A	3760_SAFETY_WIRE		1

Attachment 1 – Construction Diagram and installation method




NO.	PART NO.	PART NAME	Spec	Q'TY
1	Z9642300 001	SCREW_MACHINE_PH_M3_L10 _ORIGINALCOLOR		1
2	HP06-001 187	GORE VENT-SCREW IN TYPE		1
3	FC29-013 875A	HOUSING-QNP-6320H; ADC12 ,WHT		1
4	EP06-004 666A	SUPPLY,POWER,ETC-Q PTZ OUTDOOR;DC12V,1.8		1
5	Z6001053 501A	SCREW_MACHINE_BH_M3_L6_ WHITE		5
6	78779	ASSY FAN HEATER QNP-6320H		1

Attachment 2 – Parts List


품번	품명	수량	재질
FC15-008135A	COVER-HOUSING QNP-6320H;PC,MD	1	HN-1068
HP07-000127A	GASKET-DOME,SNP5300H	1	silicon
FC15-001430A	COVER-OPTICAL,SNP-5300	1	UF1004C
Z6009004401A	M4_SCREW_3760	3	metal
FC28-003328B	SHIELD-SUN-QNP-6320H-HANWHA;ASA,WHT	1	LI996B
FC29-013875A	HOUSING-QNP-6320H;ADC12,WHT	1	metal
Z6001053501A	SCREW-MACHINE;6001-001476,BH,+,M3,L6,Ni	5	metal
HP07-001528A	GASKET-FOR COVER BUSH_XNP-XX00RW	1	silicon
MC19-003365A	SHAFT-GUIDE QNP-6320H;SU S303	3	metal
FC18-005575A	WASHER,ETC-PLAIN,ID8.4	3	metal
FC38-001245A	SPRING,ETC-FOR SHAFT_XNP-XX00RW	3	metal
HP07-001529A	GASKET-FOR SHAFT_XNP-XX00RW	3	silicon
HP06-001187	VENT-GORE-PMF100585;MEMBRANE,SCREW IN,PM	1	PMF100585
FC18-006032A	SCREW-MACHINE;0.7,L10,SUS,M4	3	metal
FC15-007604A	COVER-BUSH_XNP-XX00RW	1	metal
FC38-001247A	SPRING,ETC-FOR SAFETY WIRE_XNP-XX00RW;SU	1	metal
FC18-004468A	SCREW-MACHINE,+,P0.4,L5,NONE,M2	2	metal
FC18-001418A	SCREW-SPECIAL_TORX10_M3_L8;TORX,BH,FP,M3	3	metal
MC06-001150A	BUSHING-CABLE_XNP-XX00RW	1	silicon

	품번	Level	자재내역	수량
-	QNP-6320H/KDO	0	QNP-6320H/KDO	
-	AM07-015142A	1	ASSY,FINAL-QNP-6320H-HANWHA	1
-	AM07-015143A	2	ASSY,MECHA-QNP-6320H	1
1	FC09-004322A	3	BRACKET-CAMERA-LEFT_SNP-6320;PC GF15%,2.	1
2	AM07-004494A	3	ASSY,PAN BODY-WN3	1
3	AM07-004495A	3	ASSY,TILT BODY-WN3	1
4	FC29-004418A	3	CAP-PAN_WN3;POM,BLACK	1
5	FC09-004654A	3	BRACKET-PAN-ROTATE;ADC12,BLACK	1
6	FC09-004655A	3	BRACKET-PAN-BASE_WN3;SECC,1.2T	1
7	FC09-004656A	3	BRACKET-TILT-LEFT_WN3;PC,BLACK	1
8	MC03-000189	3	BEARING,BALL-686ZZ;ID6,OD13,Mold Bearing	1
9	MC05-000172	3	TIMING BELT-BANDO;S2M,210MM,2PITCH,W4	2
10	EP08-001063A	3	MOTOR,STEP-STH-36C1056GA;STEPPER MOTOR	1
11	EP08-001063B	3	MOTOR,STEP-STH-36C1078;CABLE 165MM	1
12	Z6003013601A	3	SCREW-TAPTYPE;6003-000275,BH,+,B,M3,L10	4
13	Z6001053501A	3	SCREW-MACHINE;6001-001476,BH,+,M3,L6,Ni	17
14	Z6009001301A	3	TAPPING SCREW(M3xL6,와샤불이형머리,Zn-B)	1
15	FC29-001983A	3	CAP-TILT;POM,SNP-5300,BNL	1

 <p>CTK Co., Ltd. The Prime Leader of Global Regulatory Certification</p>	<p>CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501</p>	<p>REPORT No.: CTK-2021-02083 Page (17) / (25) pages</p>	
---	---	---	--

Attachment 2 – Parts List

16	Z6003020401A	4	SCREW-TAPTYPE;6003-001453,BH,+,B,M1.7,L	2
17	FC09-004333A	3	BRACKET-CAMERA-MOUNT_SNP-6320;SECC,T0.8	1
18	Z9612203007	3	MACHINE SCREW(M2xL3,FLAT HEAD)	3
19	Z6003020401A	3	SCREW-TAPTYPE;6003-001453,BH,+,B,M1.7,L	3
20	Z9612203001	3	MACHINE SCREW(FLAT HEAD, M2xL3, Ni)	6
21	PT03-003229B	3	LABEL-RATING-CAM-A-QR-CE,EAC,UL,YUPO	1
22	FC28-000762A	3	PAD-THERMAL_PAD_GP_3000S30_30X15X2,GP_30	1
-	AM07-015052A	2	ASSY,COVER DOME-QNP-6320H	1
23	FC15-008135A	3	COVER-HOUSING QNP-6320H;PC,MD	1
24	HP07-000127A	3	GASKET-DOME,SNP5300H	1
25	FC15-001430A	3	COVER-OPTICAL_SNP-5300	1
26	FC09-002559A	3	BRACKET-DOME;SECC,SNP5300H	1
27	Z6003013801A	3	SCREW-TAPTYPE;6003-000282,BH,+,B,M3,L	6
28	Z6009004401A	3	M4_SCREW_3760	3
29	Z6909025601A	3	3760_SAFETY_WIRE_COVER	1
-	AM07-015050B	2	ASSY,BODY-QNP-6320H-HANWHA	1
30	FC28-003328B	3	SHIELD-SUN-QNP-6320H-HANWHA;ASA,WHT	1
31	FC29-013875A	3	HOUSING-QNP-6320H;ADC12,WHT	1
32	AM07-015051A	3	ASSY,FAN-HEATER-QNP-6320H	1
33	FC09-012310A	4	BRACKET-HEATER QNP-6320H;A5052P	1
34	EP07-000160A	4	FAN,ELECTRIC-MBA5112XB-O15;Blower Fan	1
35	FC18-000901B	4	SCREW-MACHINE-M3L15,BH,M3,0.5,15	2
36	Z6001053501A	4	SCREW-MACHINE;6001-001476,BH,+,M3,L6,Ni	2
37	Z6001053501A	3	SCREW-MACHINE;6001-001476,BH,+,M3,L6,Ni	5
38	HP07-001528A	3	GASKET-FOR COVER BUSH_XNP-XX00RW	1
39	MC19-003365A	3	SHAFT-GUIDE QNP-6320H;SUS303	3
40	FC18-005575A	3	WASHER,ETC-PLAIN,ID8.4	3
41	FC38-001245A	3	SPRING,ETC-FOR SHAFT_XNP-XX00RW	3
42	HP07-001529A	3	GASKET-FOR SHAFT_XNP-XX00RW	3
43	HP06-001187	3	VENT-GORE-PMF100585;MEMBRANE,SCREW IN,PM	1
44	FC18-006032A	3	SCREW-MACHINE;0.7,L10,SUS,M4	3
45	HP07-001655A	3	GASKET-QNP-6320H;14X15,3MM	1
46	FC09-003142A	2	BRACKET-BLIND;OUTDOOR	2
47	Z6003013601A	2	SCREW-TAPTYPE;6003-000275,BH,+,B,M3,L10	2
48	Z6001053501A	2	SCREW-MACHINE;6001-001476,BH,+,M3,L6,Ni	6
49	FC15-002735A	2	COVER-CAMERA-FRONT_SNP-6320;PC BLACK,SE-	1
50	FC15-002736A	2	COVER-CAMERA-REAR_SNP-6320;PC BLACK,SE-1	1
51	FC15-006214B	2	COVER-DOME_IN_ONEMICRO;PC,QNP-6320,BLACK	1

 <p>CTK Co., Ltd. The Prime Leader of Global Regulatory Certification</p>	<p>CTK Co., Ltd. (Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi Gyeonggi-do KOREA, REPUBLIC OF Tel: +82-31-339-9970 Fax: +82-31-624-9501</p>	<p>REPORT No.: CTK-2021-02083 Page (18) / (25) pages</p>	
---	---	---	--

Attachment 2 – Parts List

52	Z9642300001	2	MACHINE SCREW(M3xL 10,P-Ni,PAN HEAD)	1
53	FC15-006215B	2	COVER-MICRO_SD ONLY;PC,6320,BLACK	1
-	AM07-014510A	2	ASSY,COVER-BUSH_XNP-XX00RW	1
54	FC15-007604A	3	COVER-BUSH;XNP-XX00RW	1
55	FC38-001247A	3	SPRING,ETC-FOR SAFETY WIRE_XNP-XX00RW;SU	1
56	FC18-004468A	3	SCREW-MACHINE,+;P0.4,L5,NONE,M2	2
57	FC18-001418A	3	SCREW-SPECIAL_TORX 10_M3_L8;TORX,BH,FP,M3	3
58	MC06-001150A	3	BUSHING-CABLE_XNP-XX00RW	1
59	FC15-007852A	2	COVER-GUIDE FOR RJ45 JACK_XNP-XX00RW	1
60	PT03-002973A	2	STICKER-QNP-6230;ART PAPER	1

**CTK Co., Ltd.**

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi
Gyeonggi-do KOREA, REPUBLIC OF
Tel: +82-31-339-9970
Fax: +82-31-624-9501

REPORT No.:

CTK-2021-02083

Page (19) / (25) pages

Attachment 2 – Parts List**Component - Plastics**

File Number: E115797

LOTTE CHEMICAL CORPORATION

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 748C.

Flammability	Value	Test Method
Flame Rating		UL 94
1.5 mm, ALL	V-0	IEC 60695-11-10, -20
3.0 mm, ALL	V-0	
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 746
High Amp Arc Ignition (HAI) (1.5 mm)	PLC 3	UL 746
Comparative Tracking Index (CTI)	PLC 3	UL 746
Dielectric Strength	32 kV/mm	ASTM D149 IEC 60243-1
Volume Resistivity	1.0E+17 ohms-cm	ASTM D257 IEC 60093
Thermal	Value	Test Method
RTI Elec		UL 746
1.5 mm	130 °C	
3.0 mm	130 °C	
RTI Imp		UL 746
1.5 mm	130 °C	
3.0 mm	130 °C	
RTI Str		UL 746
1.5 mm	130 °C	
3.0 mm	130 °C	
Ball Pressure Test (130°C, 3.00 mm)	Pass	IEC 60695-10-2
Physical	Value	Test Method
Outdoor Suitability	f1	UL 748C



CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi
Gyeonggi-do KOREA, REPUBLIC OF
Tel: +82-31-339-9970
Fax: +82-31-624-9501

REPORT No.:

CTK-2021-02083

Page (20) / (25) pages

Attachment 2 – Parts List



Component - Plastics

File Number: E67171

LG CHEM LTD
20 YOIDO-DONG
YONGDUNGPO-GU
SEOUL, 150-721 Republic of Korea



LI996(&)

Acrylonitrile Styrene Acrylate (ASA), pellets

(&) - May be replaced by one, two, or three numbers and/or letter, except Grade AF367SH, XR401B, AF366F and AF367T

Flammability	Value	Test Method
Flame Rating		UL 94
2.0 mm, ALL	V-0	IEC 60695-11-10, -20
3.0 mm, ALL	V-0	
Electrical	Value	Test Method
Hot-wire Ignition (HWI)		UL 746
2.0 mm	PLC 4	
3.0 mm	PLC 4	
High Amp Arc Ignition (HAI)		UL 746
2.0 mm	PLC 0	
3.0 mm	PLC 0	
Comparative Tracking Index (CTI)	PLC 2	UL 746
High Voltage Arc Tracking Rate (HVTR)	PLC 2	UL 746
Arc Resistance	PLC 5	ASTM D495
Thermal	Value	Test Method
RTI Elec		UL 746
2.0 mm	50.0 °C	
3.0 mm	50.0 °C	
RTI Imp		UL 746
2.0 mm	50.0 °C	
3.0 mm	50.0 °C	
RTI Str		UL 746
2.0 mm	50.0 °C	
3.0 mm	50.0 °C	



CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi
Gyeonggi-do KOREA, REPUBLIC OF
Tel: +82-31-339-9970
Fax: +82-31-624-9501

REPORT No.:

CTK-2021-02083

Page (21) / (25) pages

Attachment 2 – Parts List



Component - Plastics

File Number: E67171

LG CHEM LTD
20 YOIDO-DONG
YONGDUNGPO-GU
SEOUL, 150-721 Republic of Korea



LUPOY UF1004C, LUPOY UF1004CI

Polycarbonate (PC), pellets

Flammability	Value	Test Method
Flame Rating		UL 94
0.40 mm, NC	V-2	IEC 60695-11-10, -20
1.5 mm, NC	V-2	
3.0 mm, NC	V-2	
Thermal	Value	Test Method
RTI Elec		UL 746B
0.40 mm	80.0 °C	
1.5 mm	80.0 °C	
3.0 mm	80.0 °C	
RTI Imp		UL 746B
0.40 mm	80.0 °C	
1.5 mm	80.0 °C	
3.0 mm	80.0 °C	
RTI Str		UL 746B
0.40 mm	80.0 °C	
1.5 mm	80.0 °C	
3.0 mm	80.0 °C	

Attachment 3 – Photographs

<Photo 1 > Test Unit



<Photo 2 >



Attachment 3 – Photographs

<Photo 3 > Hose down test



Attachment 3 – Photographs

<Photo 4 > Test Result



<Photo 5 >





CTK Co., Ltd.

(Ho-dong) 113, Yejik-ro, Cheoin-gu, Yongin-shi
Gyeonggi-do KOREA, REPUBLIC OF
Tel: +82-31-339-9970
Fax: +82-31-624-9501

REPORT No.:

CTK-2021-02083

Page (25) / (25) pages

Attachment 3 – Photographs

<Photo 6 > Test Result

