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台灣 新北市
中和區連城路192號6樓
晶睿通訊股份有限公司
JOANNE CHANG

JOANNE CHANG
VIVOTEK INC
6TH FL, 192 LIEN CHENG RD
CHUNG HO DISTRICT
NEW TAIPEI
235 TAIWAN

Date:	2017/10/04
Subscriber:	100504413
PartySite:	125336
File No:	E324690
Project No:	4788141888
PD No:	17Q09789
Type:	R
PO Number:	C1S1708140-F01

Subject: **Procedure And/Or Report Material**

The following material resulting from the investigation under the above numbers is enclosed.

Issue

Date	Vol	Sec	Pages	Revised Date
2017/04/05	X2	A112	Revised Proc/Rpt Section	

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Please file revised pages and illustrations in place of material of like identity. New material should be filed in its proper numerical order.

NOTE: Follow-Up Service Procedure revisions DO NOT include Cover Pages, Test Records and Conclusion Pages. Report revisions DO NOT include Authorization Pages, Indices, Section General Pages and Appendixes.

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TPI File

UL TEST REPORT AND PROCEDURE

Standard:	UL 60950-1, 2nd Edition, 2014-10-14 (Information Technology Equipment - Safety - Part 1: General Requirements) CAN/CSA C22.2 No. 60950-1-07, 2nd Edition, 2014-10 (Information Technology Equipment - Safety - Part 1: General Requirements)
Certification Type:	Listing
CCN:	NWGQ, NWGQ7 (Information Technology Equipment Including Electrical Business Equipment)
Product:	Network Camera
Model:	MD8565-N
Rating:	I/P: 7.5-48 Vdc, 0.82-0.13 A; 44-57 Vdc, 0.12-0.09 A (for PoE). (Optionally provided on marking plate)
Applicant Name and Address:	VIVOTEK INC 6TH FL, 192 LIEN CHENG RD CHUNG HO DISTRICT NEW TAIPEI 235 TAIWAN

This is to certify that representative samples of the products covered by this Test Report have been investigated in accordance with the above referenced Standards. The products have been found to comply with the requirements covering the category and the products are judged to be eligible for Follow-Up Service under the indicated Test Procedure. The manufacturer is authorized to use the UL Mark on such products which comply with this Test Report and any other applicable requirements of UL LLC ('UL') in accordance with the Follow-Up Service Agreement. Only those products which properly bear the UL Mark are considered as being covered by UL's Follow-Up Service under the indicated Test Procedure.

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Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL.

Prepared by: Winnie Su Reviewed by: Max Ma

Supporting Documentation

The following documents located at the beginning of this Procedure supplement the requirements of this Test Report:

A. Authorization - The Authorization page may include additional Factory Identification Code markings.

B. Generic Inspection Instructions -

i. Part AC details important information which may be applicable to products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of this Test Report.

ii. Part AE details any requirements which may be applicable to all products covered by this Procedure. Products described in this Test Report must comply with any applicable items listed unless otherwise stated in the body of each Test Report.

iii. Part AF details the requirements for the UL Certification Mark which is not controlled by the technical standard used to investigate these products. Products are permitted to bear only the Certification Mark(s) corresponding to the countries for which it is certified, as indicated in each Test Report.

Product Description

- The equipment is a Class III Network Camera, consists of electronic components mounted on PWB, Len module and then housed within metal/plastic enclosure. It also provides a General I/O Terminal Block, one DC jack and one internal SD card slot.

- The power source can choose to use PoE or external UL Listed power supply.

Model Differences

N/A

Technical Considerations

- Equipment mobility : fixed
- Connection to the mains : No direct connection
- Operating condition : continuous
- Access location : operator accessible
- Over voltage category (OVC) : OVC I
- Mains supply tolerance (%) or absolute mains supply values : No direct connection
- Tested for IT power systems : No
- IT testing, phase-phase voltage (V) : N/A
- Class of equipment : Class III (supplied by SELV)
- Considered current rating of protective device as part of the building installation (A) : N/A
- Pollution degree (PD) : PD 2
- IP protection class : IP X0
- Altitude of operation (m) : Up to 2000 meters
- Altitude of test laboratory (m) : less than 2000 meters
- Mass of equipment (kg) : 0.41
- The product was submitted and evaluated for use at the maximum ambient temperature (Tma) permitted by the manufacturer’s specification of: 55 degree
- The product was investigated to the following additional standards: UL60950-22, Information Technology Equipment - Safety - Part 22: Equipment to be Installed Outdoors, Edition 1, including

Revision Date December 19, 2011

- The following circuit locations (with circuit/schematic designation) were investigated as a limited power source (LPS): DI-, DI+
- The following are available from the Applicant upon request: Installation (Safety) Instructions / Manual
- The outdoor equipment/enclosure was evaluated for use in an ambient range of: -25°C to 55°C
- LEDs provided in the product are considered low power devices: Yes , IR LED was tested and complied with the requirements of Exempt group LED product according to IEC/EN 62471.
- Based upon the product specification provided by the manufacturer, this unit is intended to be supplied by an UL Listed power supply suitable for use at Tma 55 degree C whose output meets SELV, LPS and is rated 7.5-48Vdc/0.82-0.13A or PoE 44-57Vdc/0.12-0.09A.
- All interconnection to the EUT is for indoor location, and therefore PoE network interconnected to the equipment is considered as SELV (Network Environment 0 per IEC TR62101)

Additional Information

N/A

Additional Standards

The product fulfills the requirements of: UL60950-22, Information Technology Equipment - Safety - Part 22: Equipment to be Installed Outdoors, Edition 1, including Revision Date December 19, 2011

Markings and instructions

Clause Title	Marking or Instruction Details
Inter-connecting cables - External detachable	Listee's Name and Part number (Marking or Instruction)
Power rating - Ratings	Ratings (voltage, frequency/dc, current)
Power rating - Company identification	Listee's or Recognized company's name, Trade Name, Trademark or File Number
Power rating - Model	Model Number
User Manual	- If the external power adapter doesn't ship with the unit, the user manual shall have the description as below or equivalent: "This product is intended to be supplied by a UL Listed Power Adapter with LPS output, rated 7.5-48 Vdc, 0.82-0.13A or PoE 44-57 Vdc, 0.12-0.09 A." - User manual shall have the description as below or equivalent: "The equipment is to be connected only to PoE networks without routing to the outside plant."

Special Instructions to UL Representative

Please verify the following items for the external power adapter which is controlled with "Various" in critical component list. (Provided from Customer)

1. Tma shall be minimum 55 degree C.
2. Unit output shall be complied with LPS.
3. Report version should be UL60950-1, 2nd edition, 2014-10-14.

Production-Line Testing Requirements

Electric Strength Test Special Constructions - Refer to Generic Inspection Instructions, Part AC for further information.

Model	Component	Removable Parts	Test probe location	V rms	V dc	Test Time, s
--	--	--	--	--	--	--

Earthing Continuity Test Exemptions - This test is not required for the following models:

All models in this test report.

Electric Strength Test Exemptions - This test is not required for the following models:

All models in this test report.

Electric Strength Test Component Exemptions - The following solid-state components may be disconnected from the remainder of the circuitry during the performance of this test:

--

Sample and Test Specifics for Follow-Up Tests at UL

Model	Component	Material	Test	Sample(s)	Test Specifics
N/A	--	--	--	--	--

1.5.1	**TABLE: list of critical components**					Pass
Object/part or Description	Manufacturer/ trademark	type/model	technical data	Product Category CCN(s)	Required Marks of Conformity	Supplement ID
S01. Label	Various	Various	70 degree C min.	PGDQ2 or PGJI2	UL	
S01a. Permanency of Marking (alternate)	--	--	Engraved laser marking.	--	--	
S01b. Permanency of Marking (alternate)	--	--	Permanently ink-stamped, silk-screened, molded in, or in self-adhesive labels.	--	--	
S02. Internal Plastic Part Materials	Various	Various	HB or HBF min.	QMFZ2	UL	
S03. Connectors and Receptacles (secondary SELV)	Various	Various	--	ECBT2 or RTRT2 or DUXR2	UL	
S03a. Connectors and Receptacles (secondary SELV) (alternate)	Various	Various	Copper alloy pins housed in bodies of plastic rated V-2 min.	QMFZ2	UL	
S04. Internal Wiring (secondary SELV) (optional)	Various	Various	FEP, PTFE, PVC, TFE, neoprene, polyimide or marked VW-1; 60 V min., 60 degree C min.	AVLV2	UL	
S05. Interconnecting Cable (optional)	Various	Various	3.05 m long max., jacketed, VW-1 or FT-1, 60 V min., 60 degree C min.	AVLV2 or ZPFW2 or DVPJ	UL	
S05a. Interconnecting Cable (optional) (alternate)	Various	Various	3.05 m long max., jacketed, type CMP, CMR, CMG, CM, CMX, CMUC, or CMH.	DUZX, ZPFW2	UL	
S05b. Interconnecting Cable (optional) (alternate)	Various	Various	3.05 m long max., jacketed, VW-1 or FT-1, 57 V min., 60 degree C min.	DUXR	UL	
S06. Printed Wiring Boards	Various	Various	V-1 min., 105 degree C min.	ZPMV2	UL	
01. Power Adaptor (optional)	Various	Various	O/P: 0.12-0.09 A, 44-57 Vdc or 0.82-0.13 A, 7.5-48 Vdc. Tma 55 degree C min., L.P.S.	QQGQ or NWGQ	UL	
02. Metal Enclosure	--	--	Aluminum, 3.15 mm thick min.	--	--	4-01

			See Enclosure/ Diagrams ID 4-01 for details.			
03. Plastic Cover	Teijin Limited Resin And Plastic	L-1225Z(#1)(f1)	HB, 2.5 mm thick min., 115 degree C min. See Enclosure/ Diagrams ID 4-02 for details.	QMFZ2	UL	4-02
04. PoE Transformer (T1)	Various	Various	See Enclosure/ Diagrams ID 4-03 for details.	--	--	4-03
04-01. Coil	Various	Various	105 degree C min.	OBMW2	UL	
05. Electric Double Layer Capacitors (BT1)	Various	Various	0.33 F, 5.5 Vdc.	--	--	
06. O-ring (between plastic cover and metal enclosure)	Momentive Performance Materials Japan L L C	TSE2186U(aq)	V-0. See Enclosure/ Diagrams ID 4-04 for details. (Vivotek part No. 612063300G)	QMFZ2	UL	4-04
07. O-ring (between metal cover and metal enclosure)	Momentive Performance Materials Japan L L C	TSE2186U(aq)	V-0. See Enclosure/ Diagrams ID 4-05 for details. (Vivotek part No. 612063400G)	QMFZ2	UL	4-05
08. Cable Gland	AVC Industrial Corp	S80.1(AVC)	See Enclosure/ Diagrams ID 4-06 for details. (Vivotek part No. 612031601G)	JMLU2	UL	4-06
09. IR LED (four provided)	Lextar Electronics Corporation	PR88F31	940 nm. 220 mW. Exempt Group. See Enclosure ID 3-12, 3-13 for details.	--	--	
09a. IR LED (four provided) (alternate)	Ligitek Electronics Co Ltd	LG-CU3535NIR-1-T350-LSA	Peak Emission Wavelength: 940 nm. Power Dissipation: 1.3 W. Exempt Group. See Enclosure ID 3-14, 3-15 for details.	--	--	
10. Desiccant (optional)	--	--	Mass 4 g max.	--	--	
11. O-ring (between metal cover and microphone)	Momentive Performance Materials Japan L L C	TSE2186U(aq)	V-0. See Enclosure/ Diagrams ID 4-07 for details. (Vivotek part No. 612042700G)	QMFZ2	UL	

12. O-ring for Anti-Tamper Screws	Dow Corning Toray Co Ltd	SH881U	HB. See Enclosure/ Diagrams ID 4-08 for details. (Vivotek part No. 611059800G)	QMFZ2	UL	

Enclosures

Type	Supplement Id	Description
Photographs	3-01	Overall view 1
Photographs	3-02	Overall view 2
Photographs	3-03	Connector view
Photographs	3-04	Top view with IRLED board type A
Photographs	3-05	Internal view 1
Photographs	3-06	Internal view 2
Photographs	3-07	Internal view 3
Photographs	3-08	Mainboard view 1
Photographs	3-09	Mainboard view 2
Photographs	3-10	Sensor board view 1
Photographs	3-11	Sensor board view 2
Photographs	3-12	IRLED board type A view 1
Photographs	3-13	IRLED board type A view 2
Photographs	3-14	IRLED board type B view 1
Photographs	3-15	IRLED board type B view 2
Photographs	3-16	Internal view with IRLED board type B
Photographs	3-17	Top view with IRLED board type B
Diagrams	4-01	Metal Enclosure
Diagrams	4-02	Plastic Cover
Diagrams	4-03	PoE Transformer (T1)
Diagrams	4-04	O-ring (between plastic cover and metal enclosure)
Diagrams	4-05	O-ring (between metal cover and metal enclosure)
Diagrams	4-06	Cable Gland
Diagrams	4-07	O-ring (between metal cover and microphone)
Diagrams	4-08	O-ring (for Anti-Tamper Screws)
Miscellaneous	7-01	UL 60950-22 test report


MD8565-N
Network Camera
MAC: 0002D1517FE6
VIVOTEK
IP66
RoHS
Pat. 6,930,709
www.vivotek.com
Made in Taiwan
Sample


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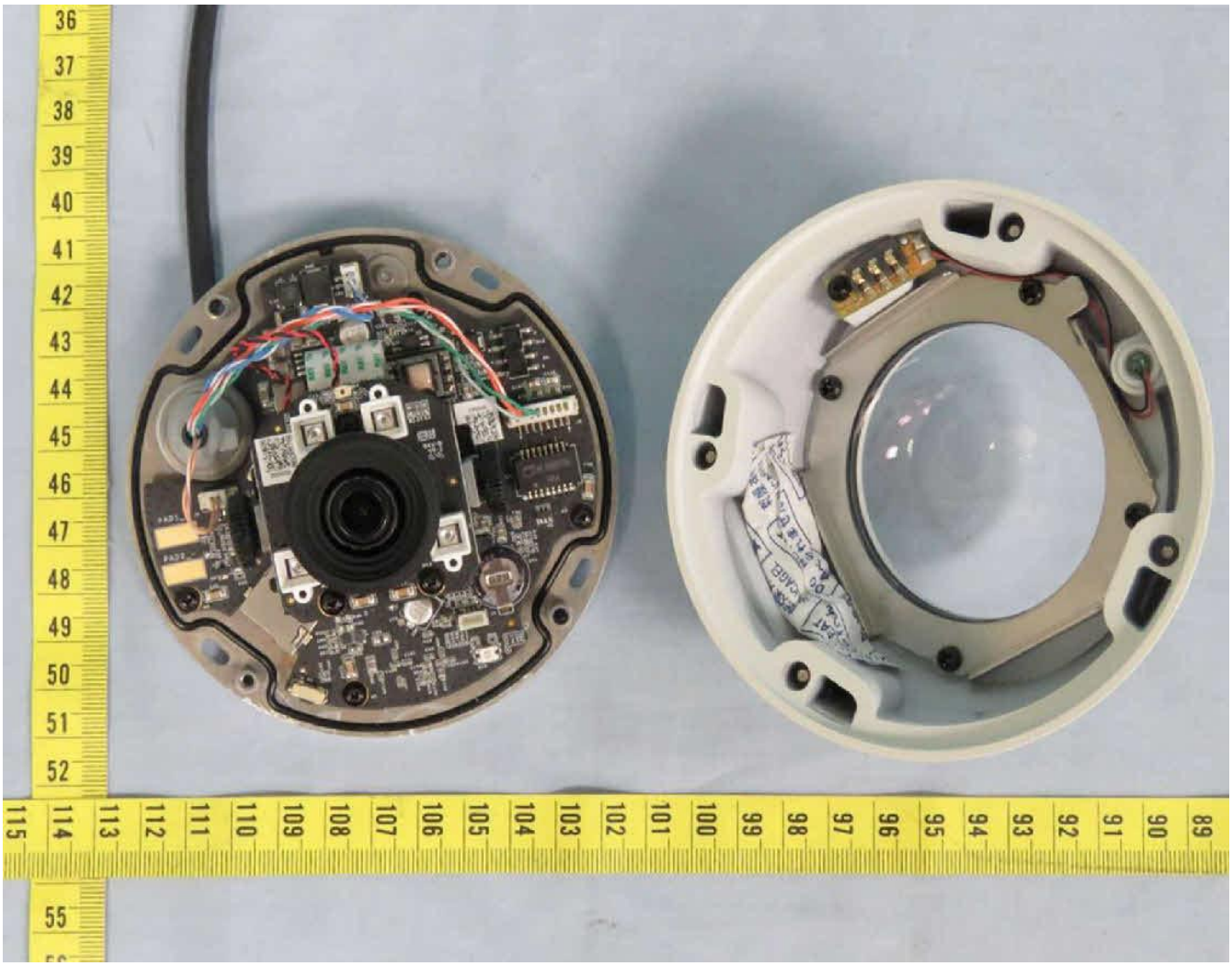
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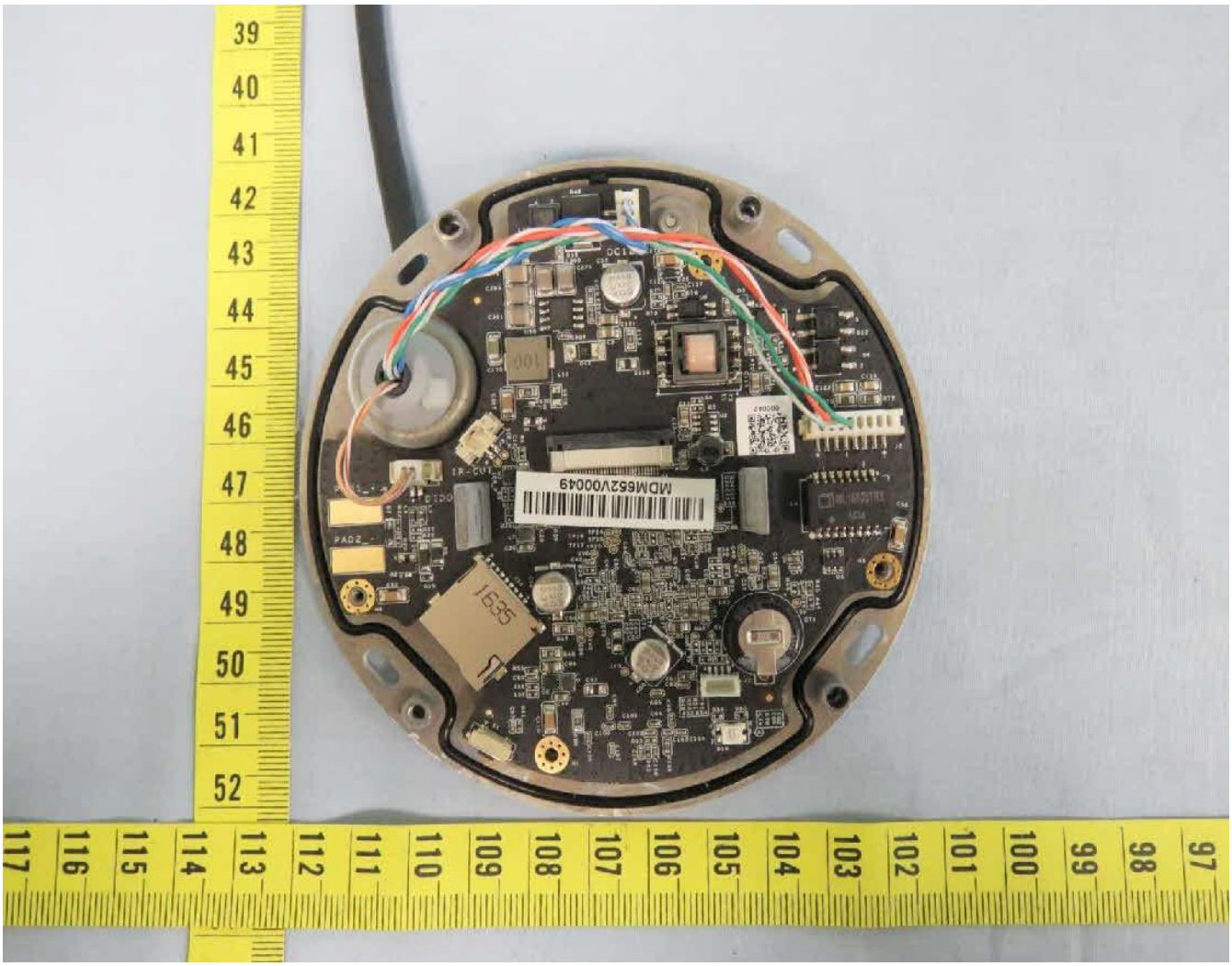
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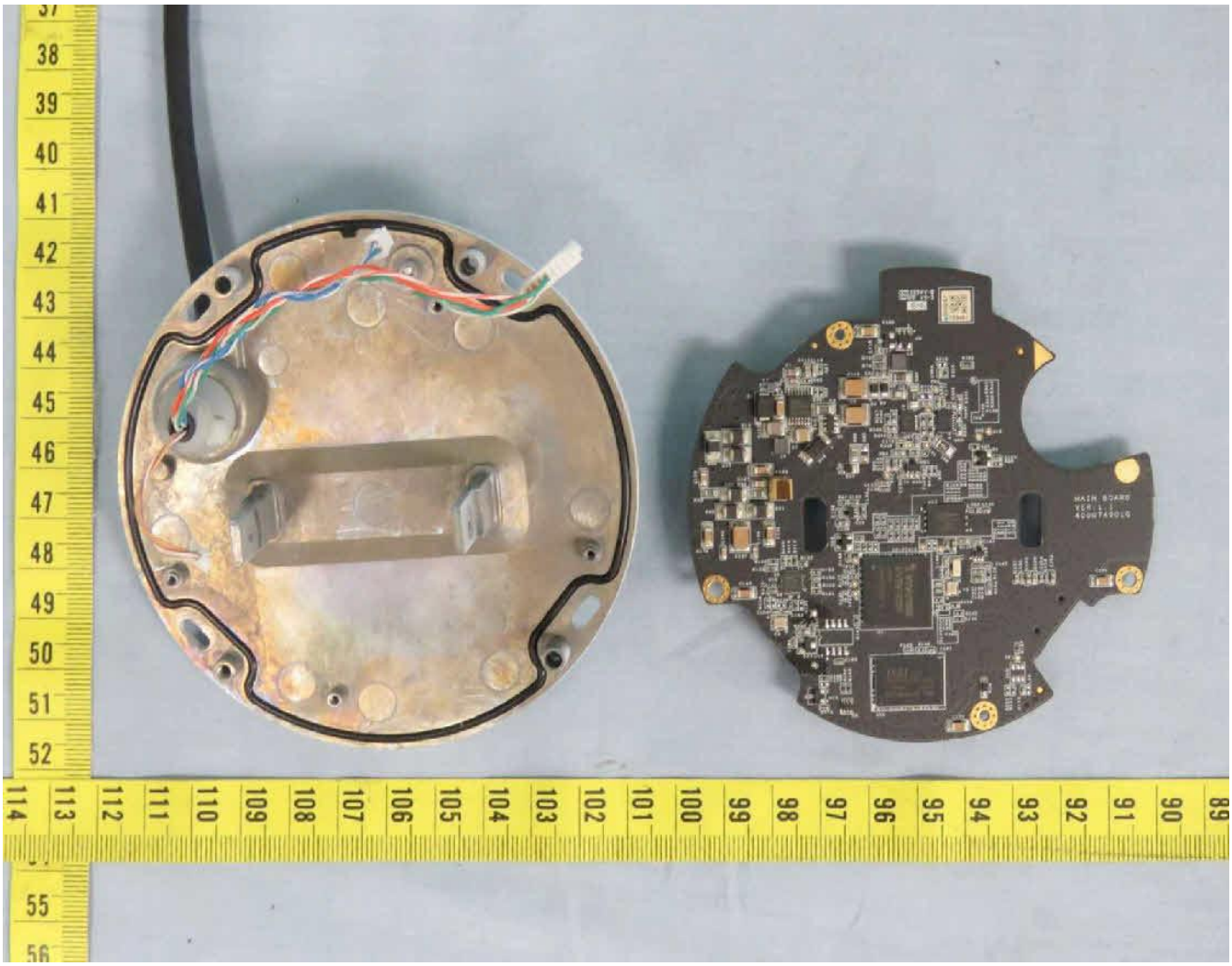
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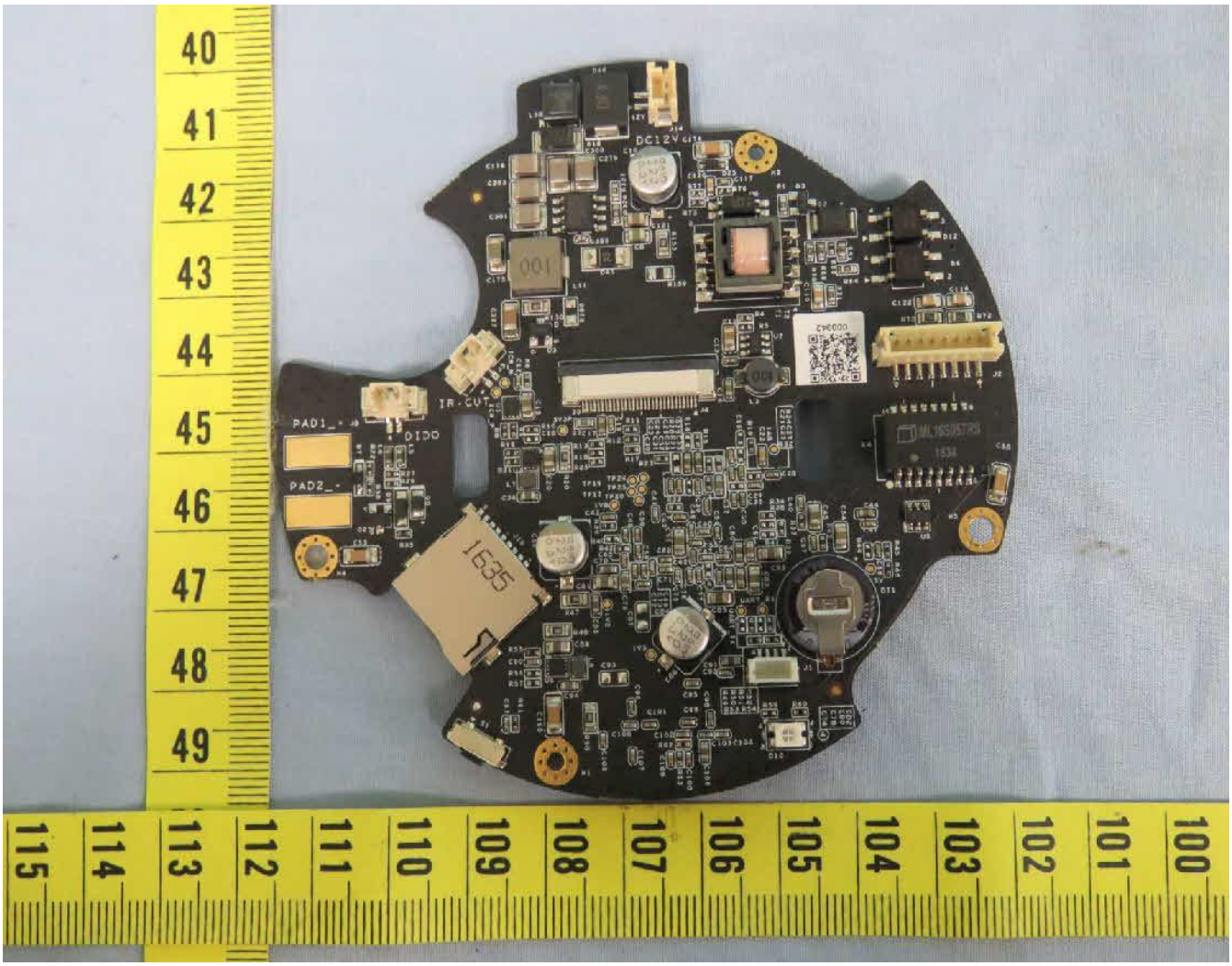
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PAD2_-
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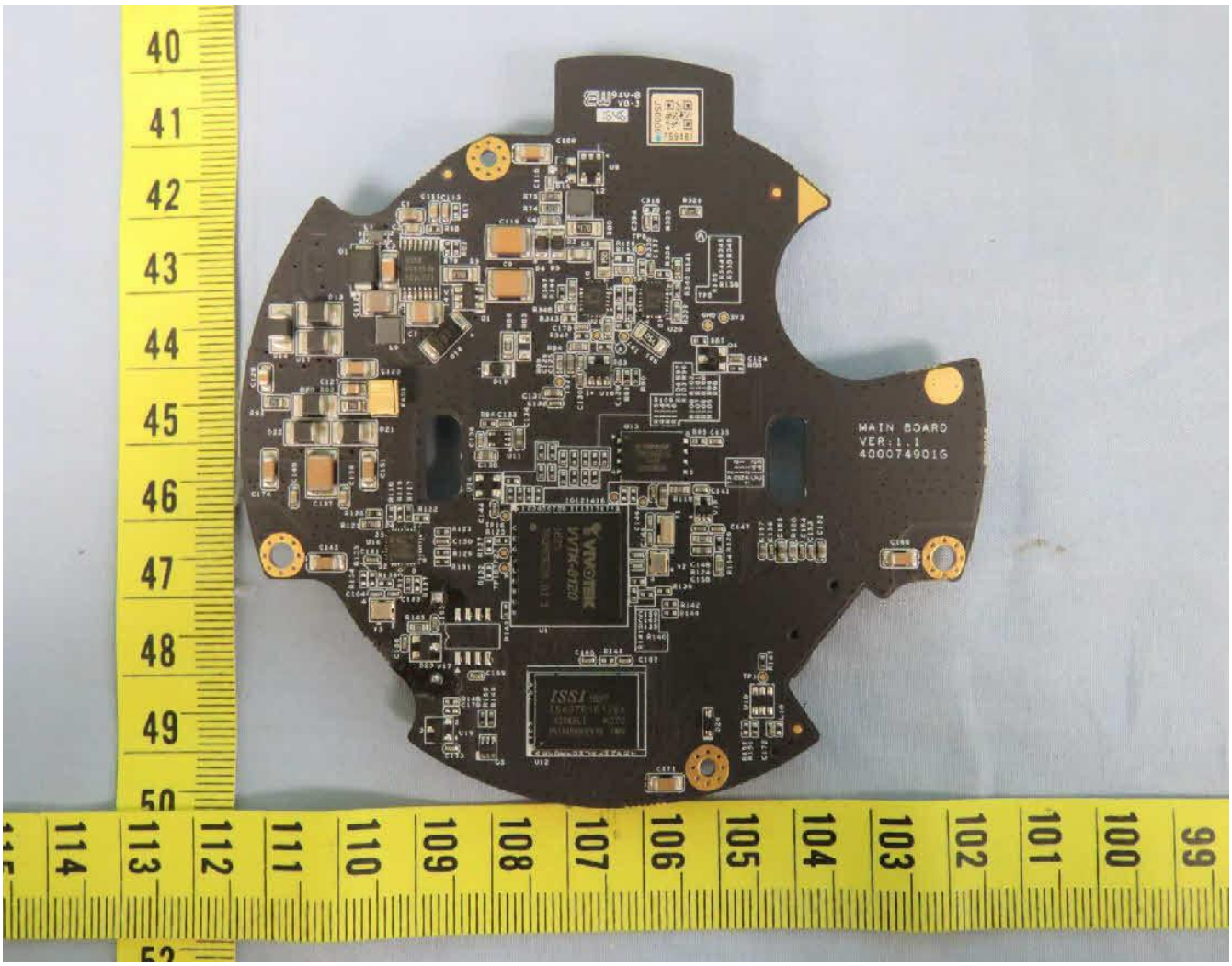
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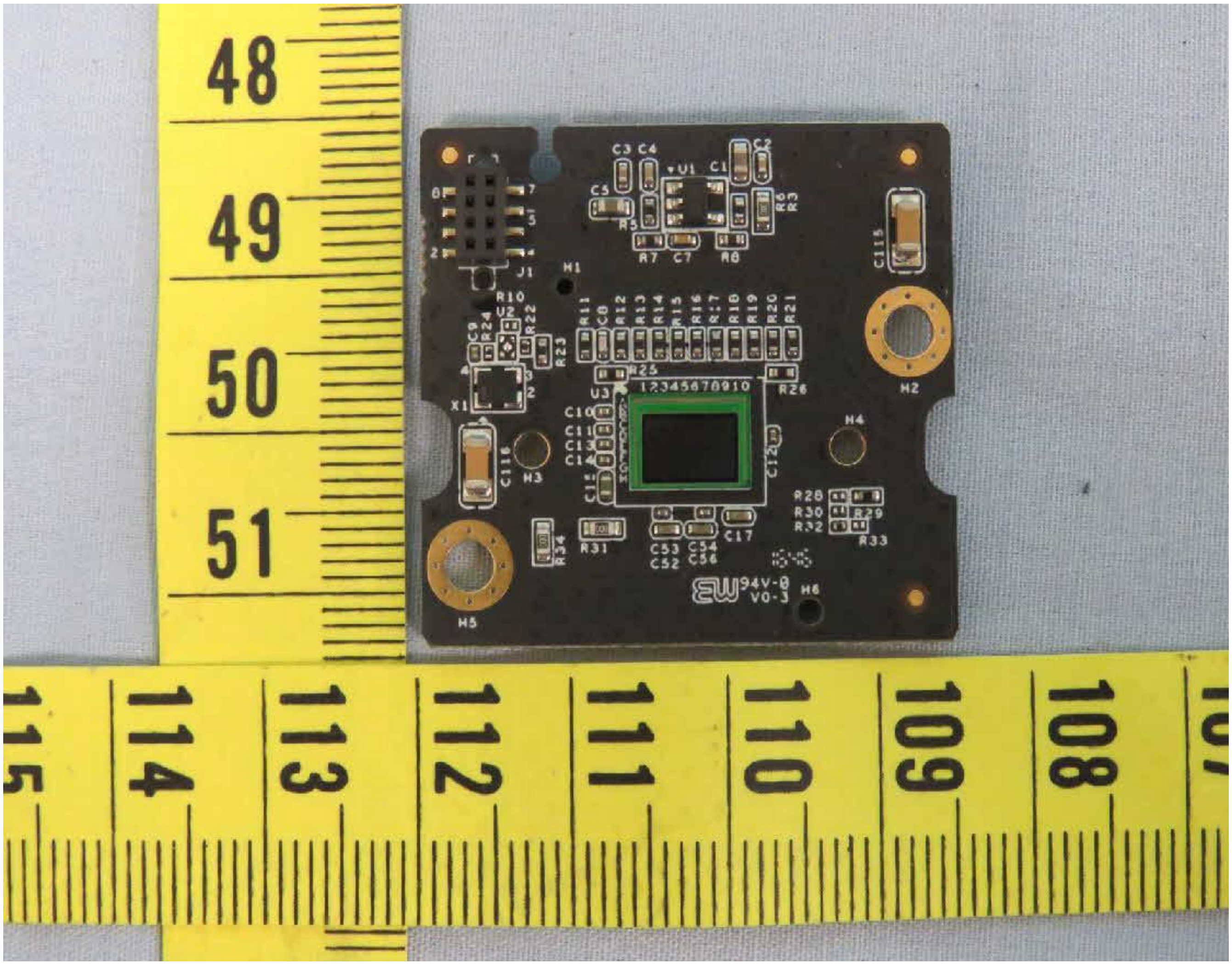
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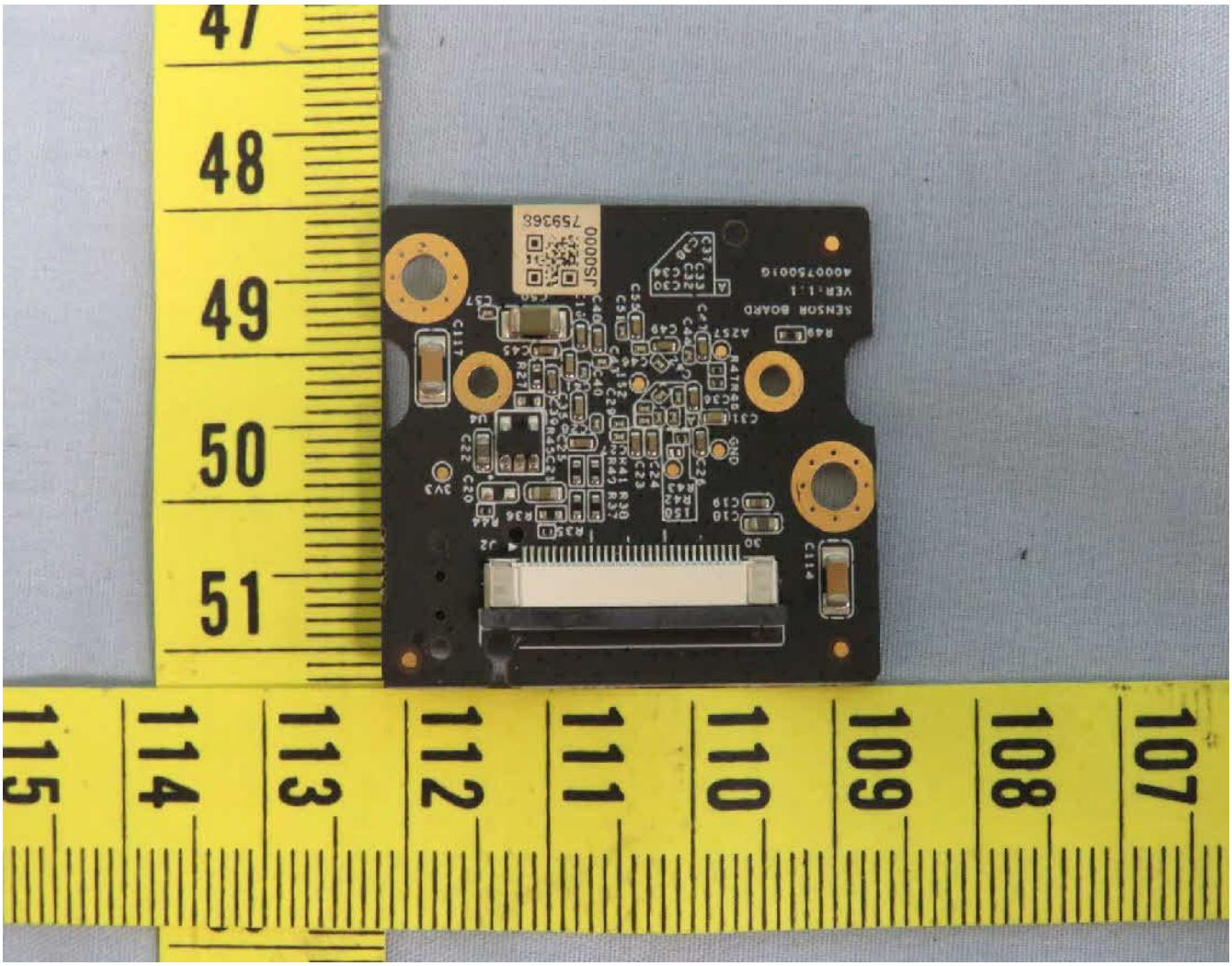
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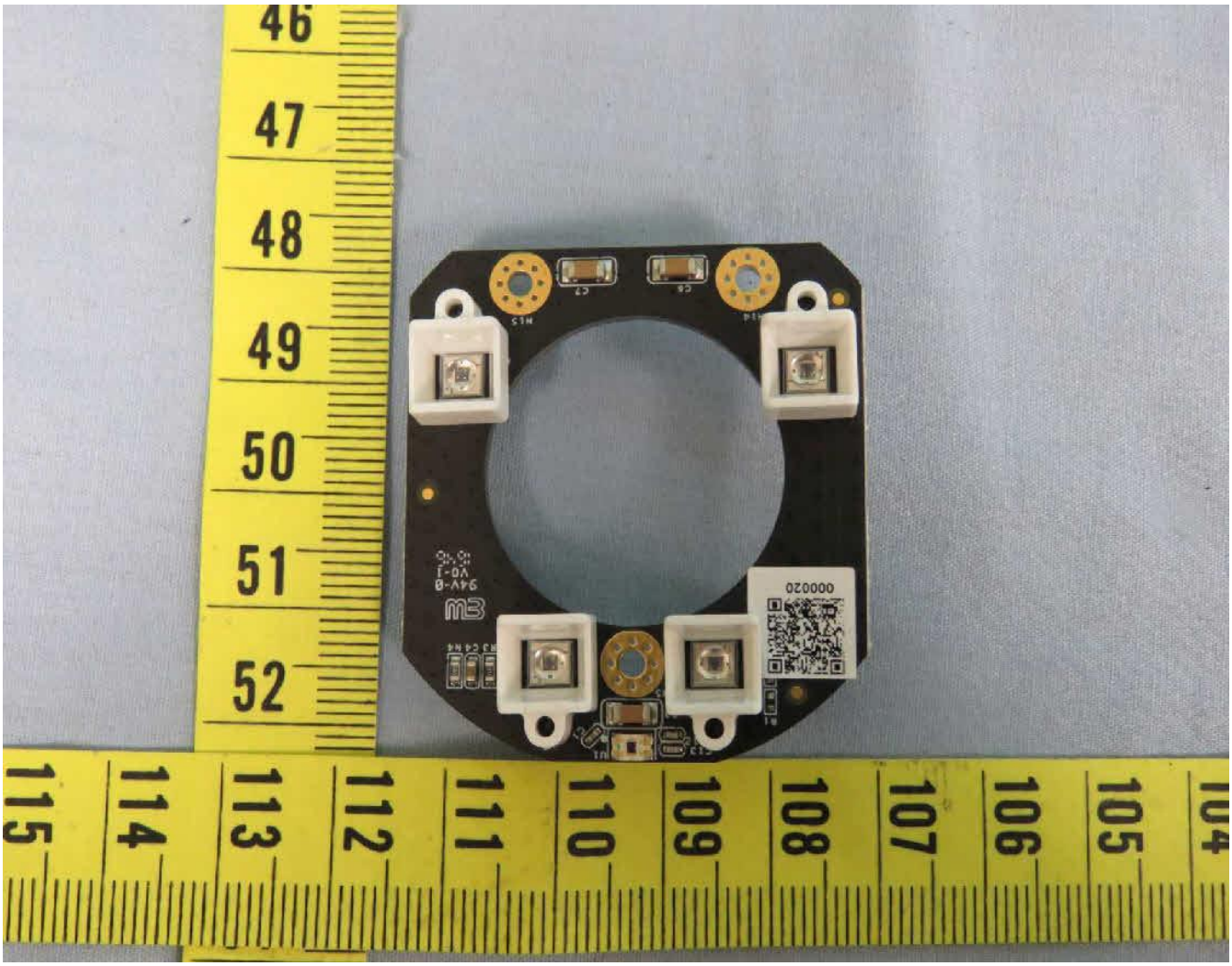
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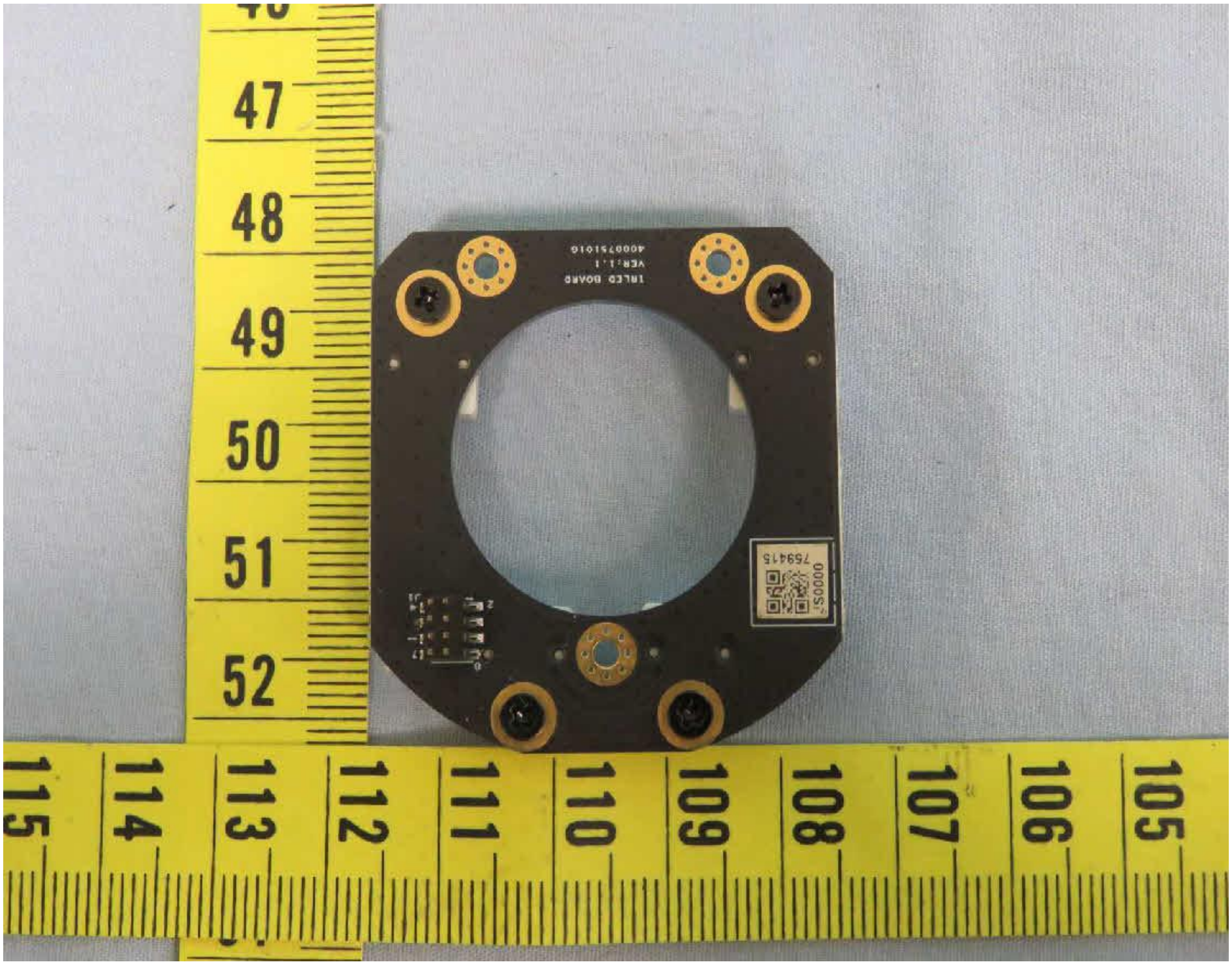

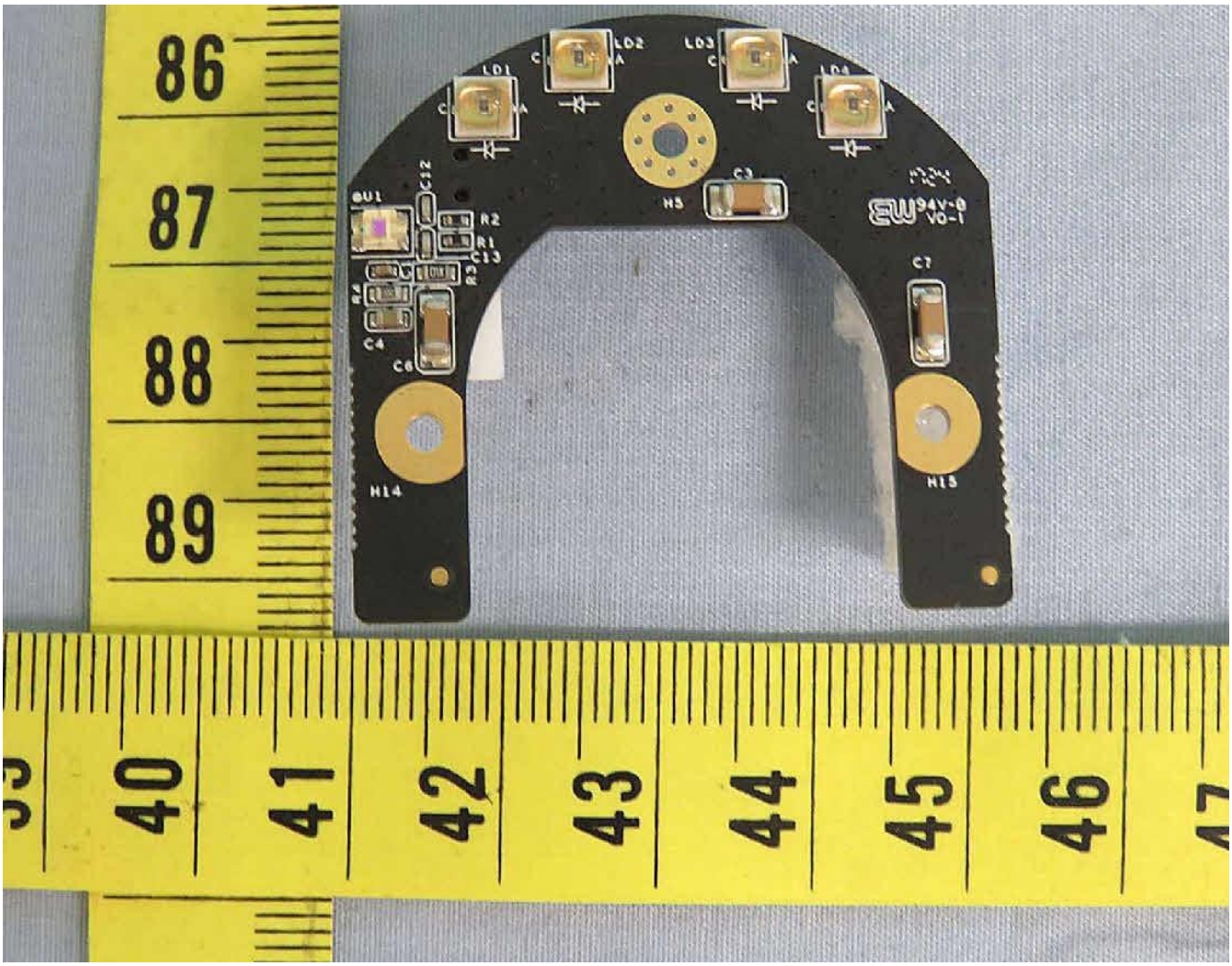
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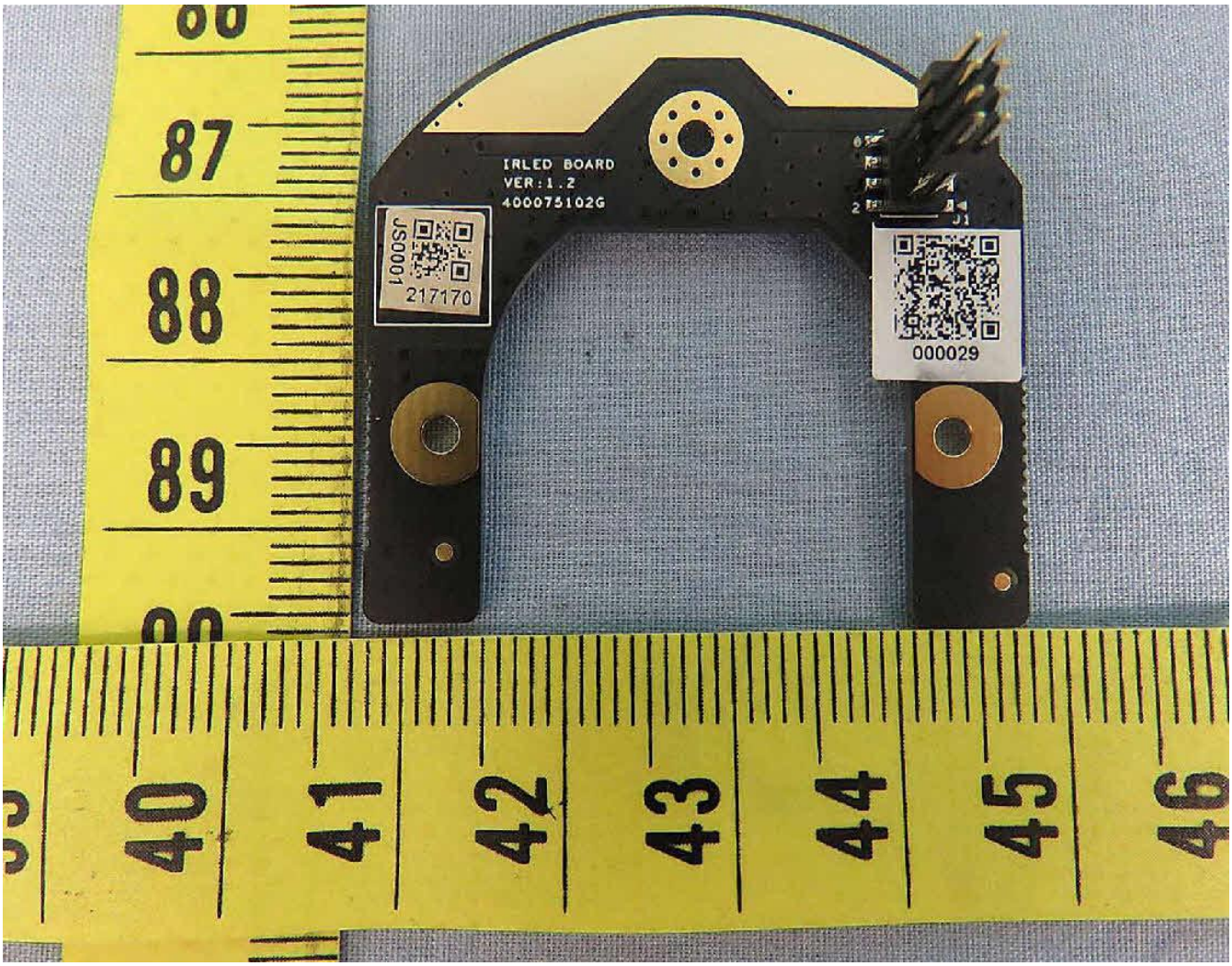
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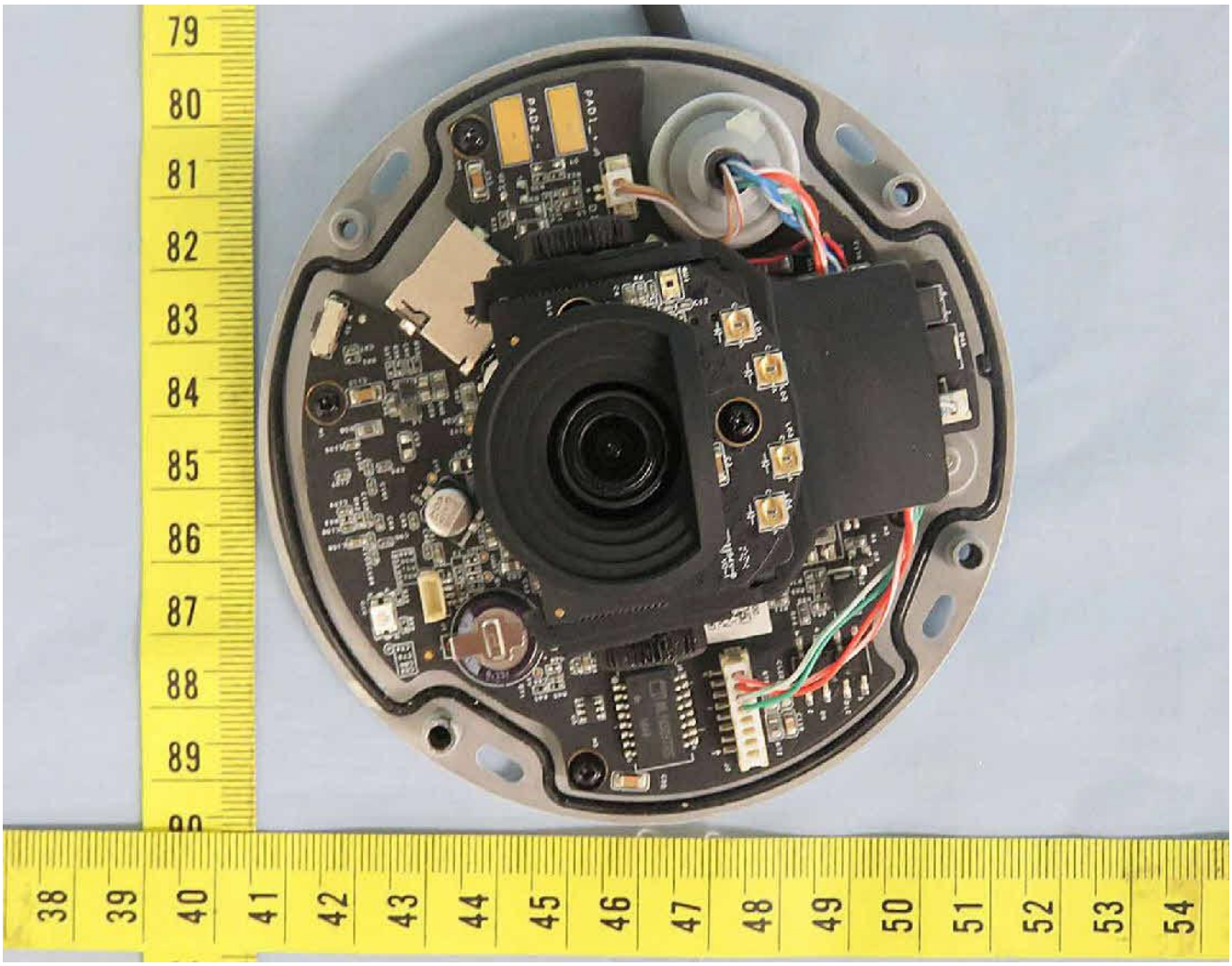
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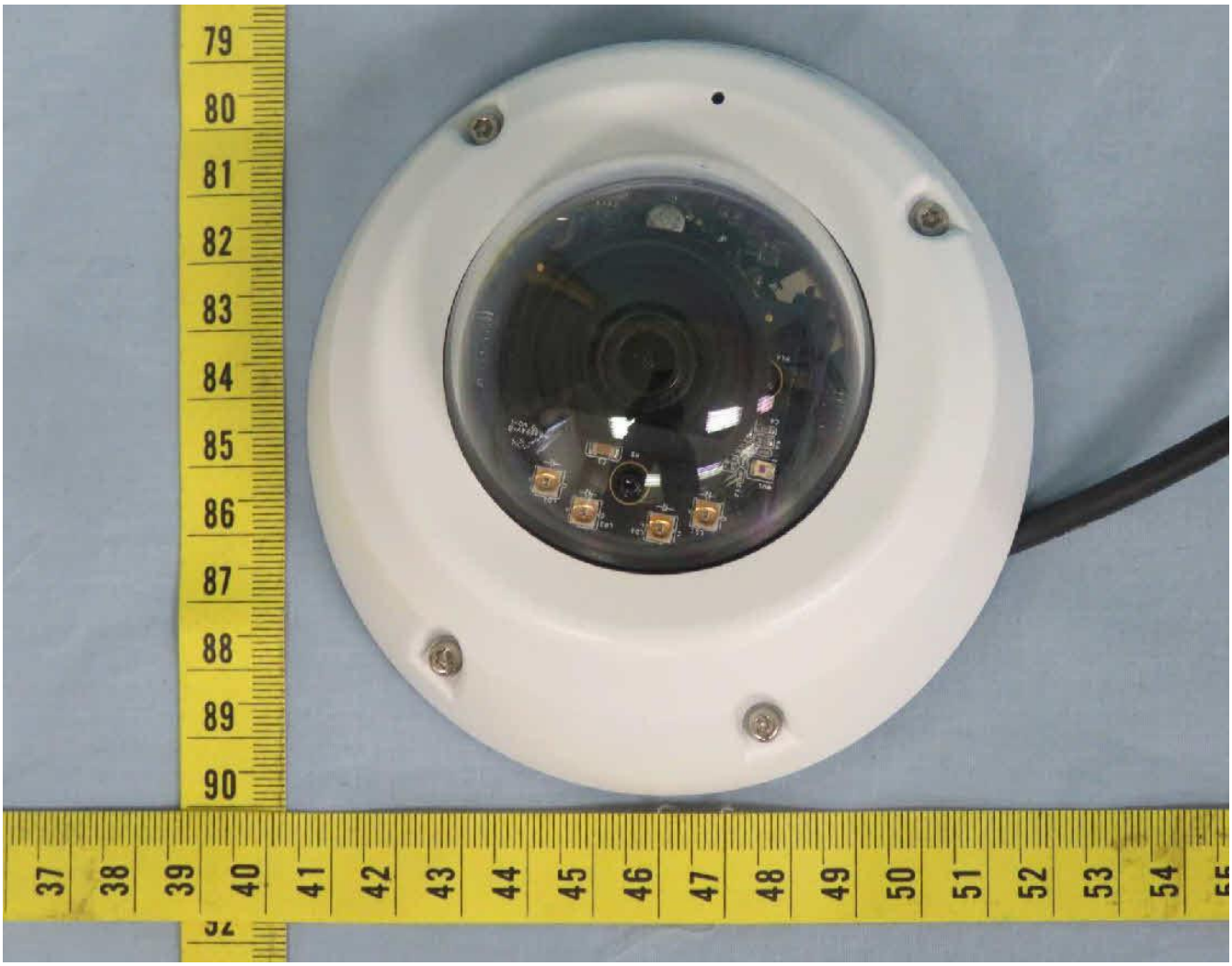
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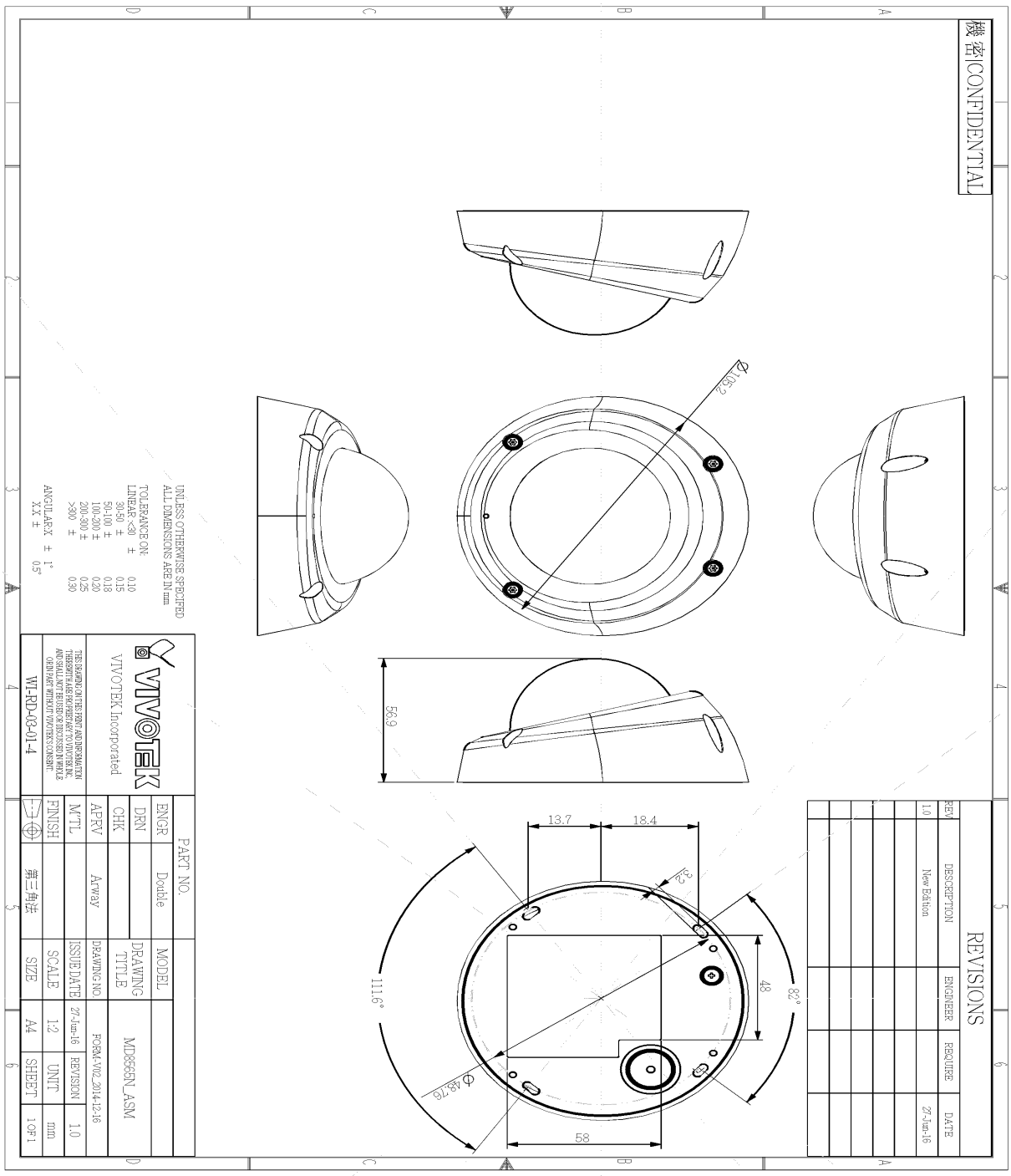
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DESCRIPTION
ENGINEER
REQUIRE
DATE
1.0
New Edition
27-Jun-16
UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN mm
TOLERANCE ON:
LINEAR <30 ± 0.10
30-50 ± 0.15
50-100 ± 0.18
100-200 ± 0.20
200-300 ± 0.25
>300 ± 0.30
ANGULAR X ± 1°
XX ± 0.5°
VIVOTEK
VIVOTEK Incorporated
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WI-RD-03-01-4
PART NO.
Double
MODEL
ENGR
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CHK
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DRAWING TITLE
MD8566N_ASM
DRAWING NO.
FORM-V02_2014-12-16
ISSUE DATE
27-June-16
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Φ108.2
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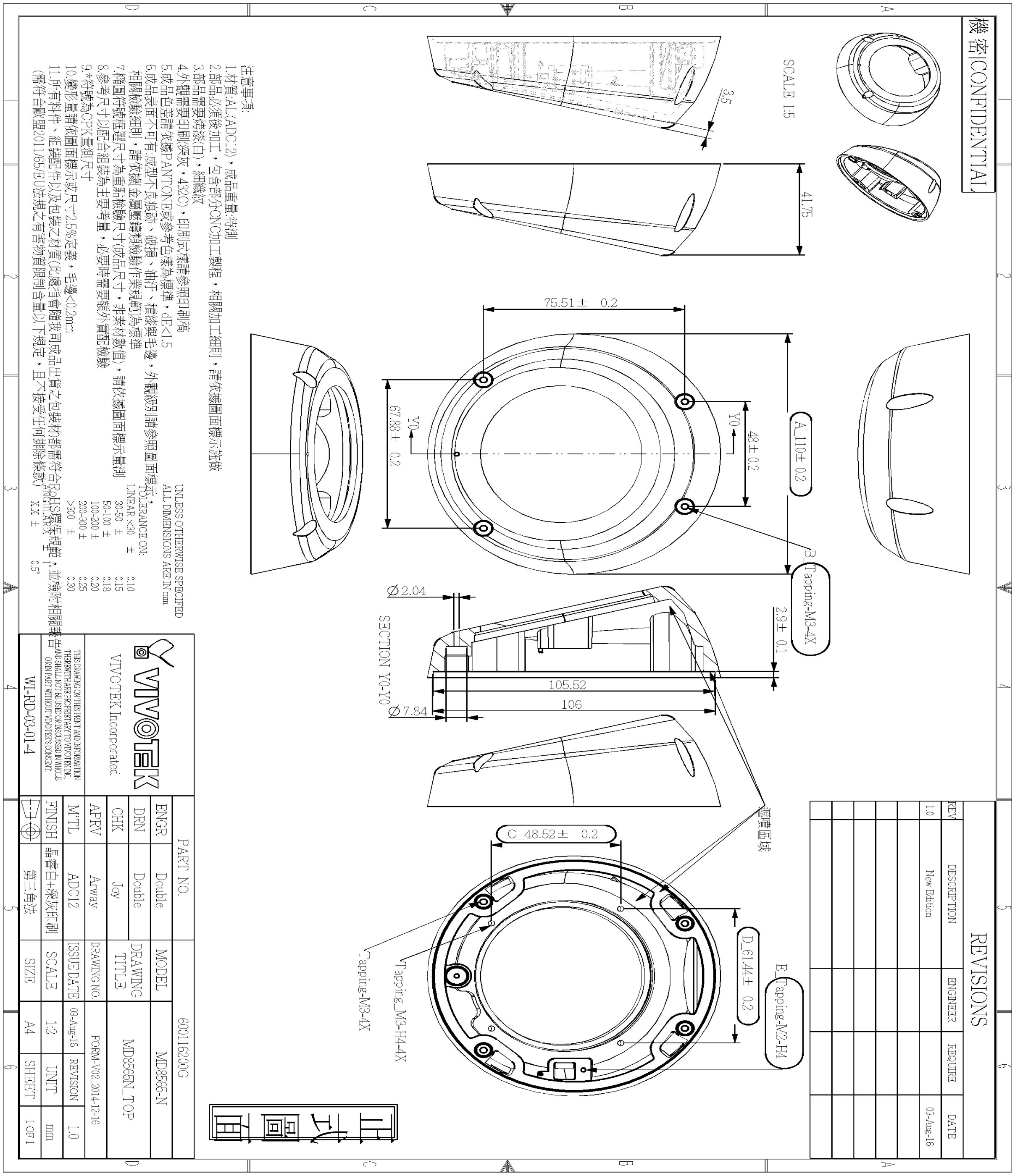
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C_48.52± 0.2
D_61.44± 0.2
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Tapping_M3-H4-4X
Tapping-M3-4X
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03-Aug-16
VIVOTEK Incorporated
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600116200G
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MD8565-N
DRAWING TITLE
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DRN Double
CHK Joy
APRV Arway
M'TL ADC12
FINISH
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SIZE A4
UNIT mm
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REVISION 1.0
ISSUE DATE 03-Aug-16
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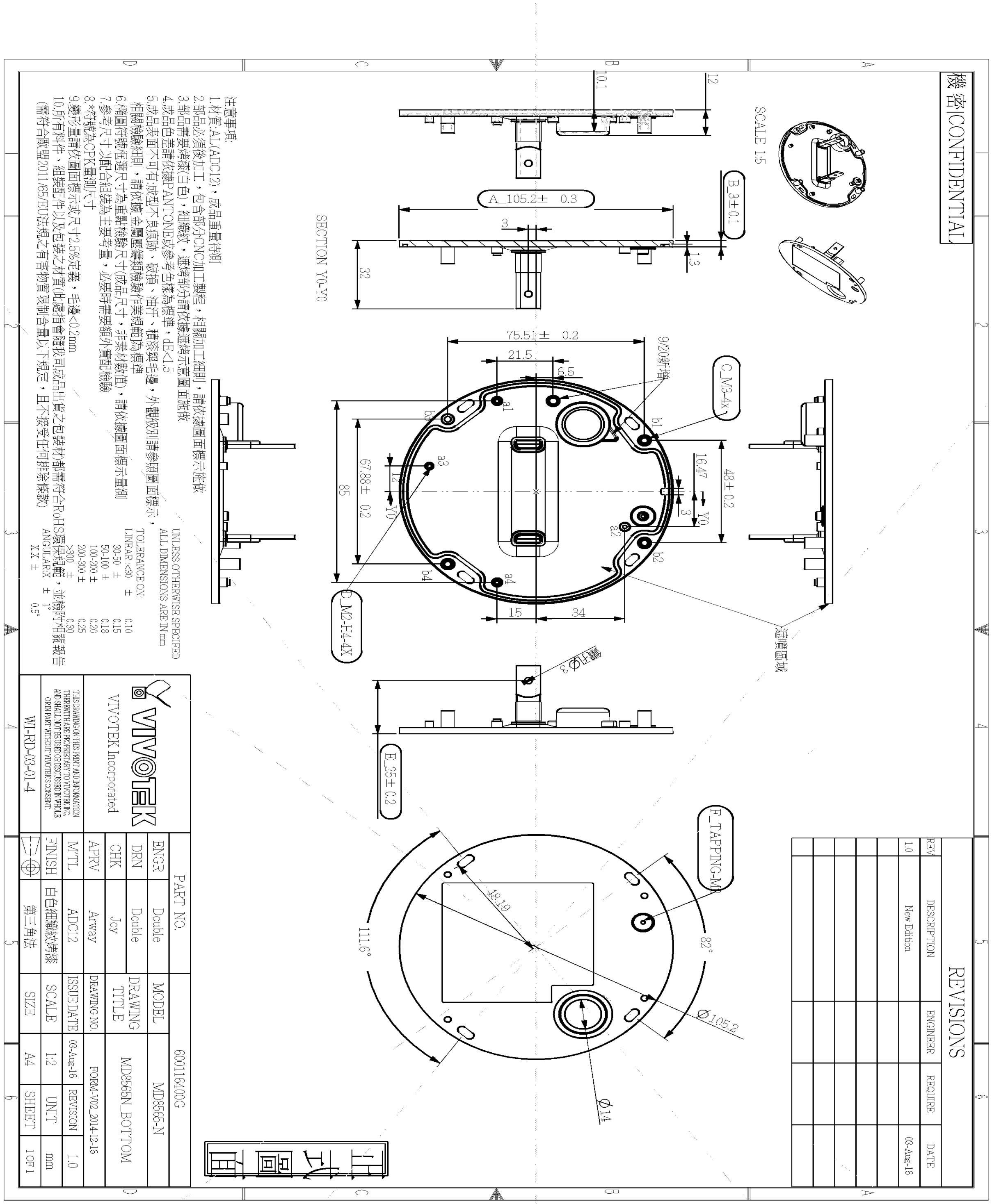
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VIVOTEK Incorporated
600116400G
MD8565-N
MD8565N_BOTTOM
ADC12
WI-RD-03-01-4

File E324690 Vol. X2 Sec. A112 DIA-02 Issued: 2017-04-05

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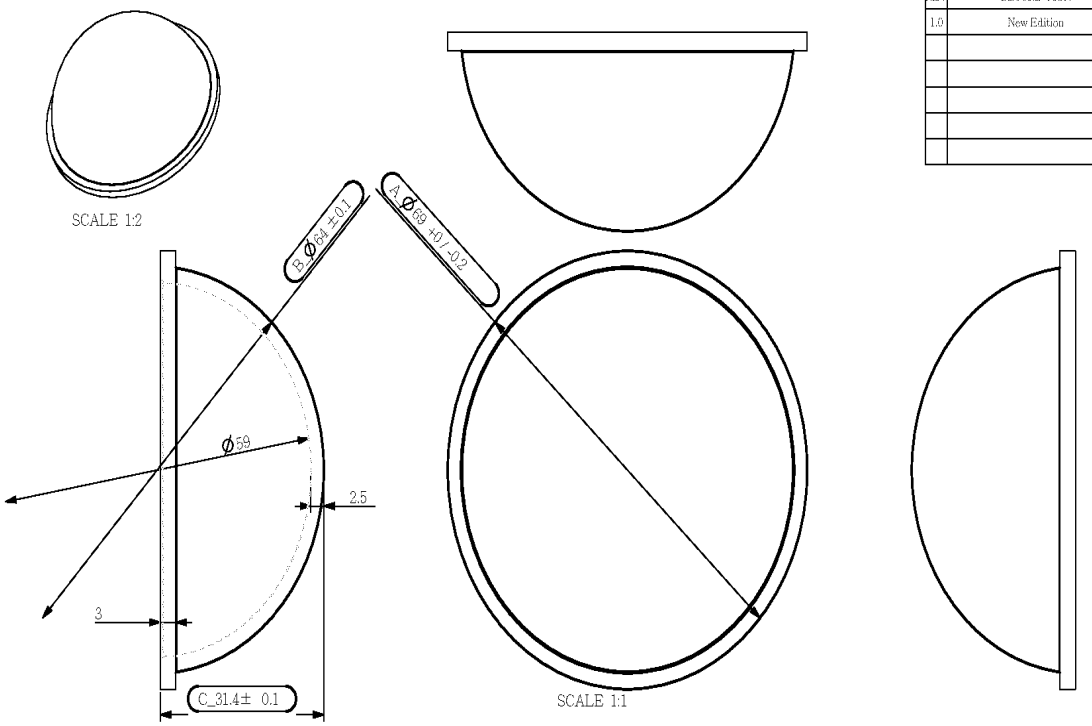
REVISIONS				
REV	DESCRIPTION	ENGINEER	REQUIRE	DATE
1.0	New Edition			03-Aug-16



正式圖面

注意事項:
1.材質:PC(TEIJIN_L-1225Z)，具UL防火(94HB)與耐候(f1)等級
2.平均肉厚:2.5mm，成品重量:待測
3.表面需硬化處理(Hard Coating)，硬度值>1H
4.H.C.吊柄剪斷後，缺口需確保平整或凹陷
5.成品需加貼保護膠膜(需耐溫70度/48hrs，無殘留痕跡)
6.成品表面不可有:成型不良痕跡、破損、油汙、殘料與毛邊，外觀級別請參照圖面標示
相關檢驗細則，請依據[Clear Cover檢驗作業規範]為標準
7.橢圓符號框選尺寸為重點檢驗尺寸(成品尺寸，非素材數值)，請依據圖面標示量測
8.參考尺寸以配合組裝為主要考量，必要時需要額外實配檢驗
9.*符號為CPK量測尺寸
10.變形量請依圖面標示或尺寸2.5%定義，毛邊<0.1mm
11.所有料件、組裝配件以及包裝之材質(此處指會隨我司成品出貨之包裝材)都需符合RoHS環保規範，並檢附相關報告
(需符合歐盟2011/65/EU法規之有害物質限制含量以下規定，且不接受任何排除條款)

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN mm

TOLERANCE ON:
LINEAR: <30 ± 0.10
30-50 ± 0.15
50-100 ± 0.18
100-200 ± 0.20
200-300 ± 0.25
ANGULAR: X ± 1°
X.X ± 0.5°

VIVOTEK Incorporated

THIS DRAWING ON THIS PRINT AND INFORMATION THEREWITH ARE PROPRIETARY TO VIVOTEK INC. AND SHALL NOT BE USED OR DISCLOSED IN WHOLE OR IN PART WITHOUT VIVOTEK'S CONSENT.

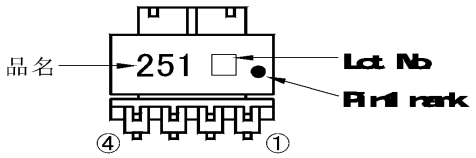
WI-RD-03-01-4

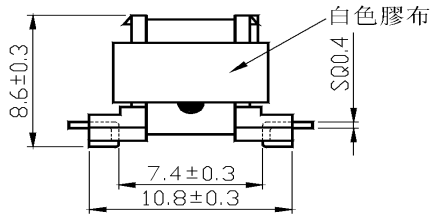
PART NO.		600116100G			
ENGR	Double	MODEL	MD8565N		
DRN	Double	DRAWING TITLE	MD8565N_OPTICS_COVER		
CHK	Joy				
APRV	Arway	DRAWING NO.	FORM-V02_2014-12-16		
M'TL	透明PC(L-1225Z)	ISSUE DATE	03-Aug-16	REVISION	1.0
FINISH		SCALE	3:10	UNIT	mm
	第三角法	SIZE	A4	SHEET	1 OF 1

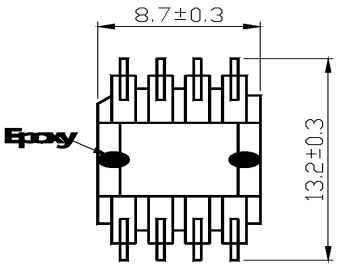
承 認 書 Specifications	管理番号 Classified No.	TT3-ASST00415	2/5
品 名 TITLE	STE8-251		

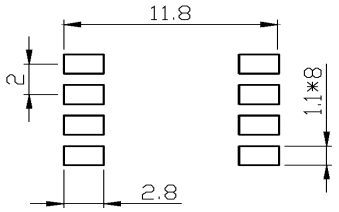
外形、寸法 Configuration and Dimensions

単位: mm
未注公差: ±0.1mm



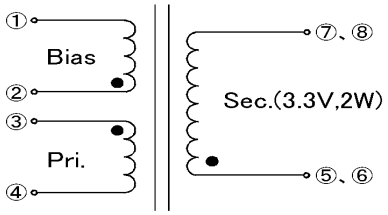






Recommended
Land Pattern

Schematic



注意事項 Note

①	組立 Assemble	鐵芯組立用膠帶(#25 White)貼3T固定。 Fix the core by binding it with three turns of polyester tape (#25 White)
②	接着 Adhesive	鐵芯與線圈之間 2處用接着剤固定。 Fix the core and coil with 2 points by adhesive.
③	捺印 Marking	Lot No.表示 : (EIAJ RC1001規格 1文字) Lot No. : (EIAJ RC1001 Standard 1Digit)
④	外觀 Appearance	端子寸法為不含錫尖寸法。 Dimension: Do not measure the sharp point of solder treatment at the terminals.

承 認 書 Specifications	管理番号 Classified No.	TT3-ASST00415	3/5

品 名	TITLE	STE8-251

電氣特性、檢查条件 Electric Characteristics and Test Conditions

No.	測定項目 Test Items	測定規格 Specifications	測定条件 Conditions	測定端子 Measuring Points	測定器 Instruments
1	電感 Inductance	250μH±10%	10kHz 100mVAC	④--③	LCR 測試儀 LCR Meter (HP4284A or 相當品)
2	漏電感 Leakage Inductance	9.5μH MAX	100kHz 100mVAC (Short ①,②,⑤,⑥,⑦,⑧)	④--③	LCR 測試儀 LCR Meter (HP4284A or 相當品)
3	直流抵抗 DC Resistance	1.32 Ω±20% 47.0 mΩ±20% 0.50 Ω±20%		④--③ ⑤,⑥--⑦,⑧ ②--①	mΩ 測試儀 mΩ Meter (TSURUGA 3563 or 相當品)
4	匝數比 ★ Turn Rations	④-③:②-①:⑤,⑥-⑦,⑧=1:0.26:0.10			

注意 Note

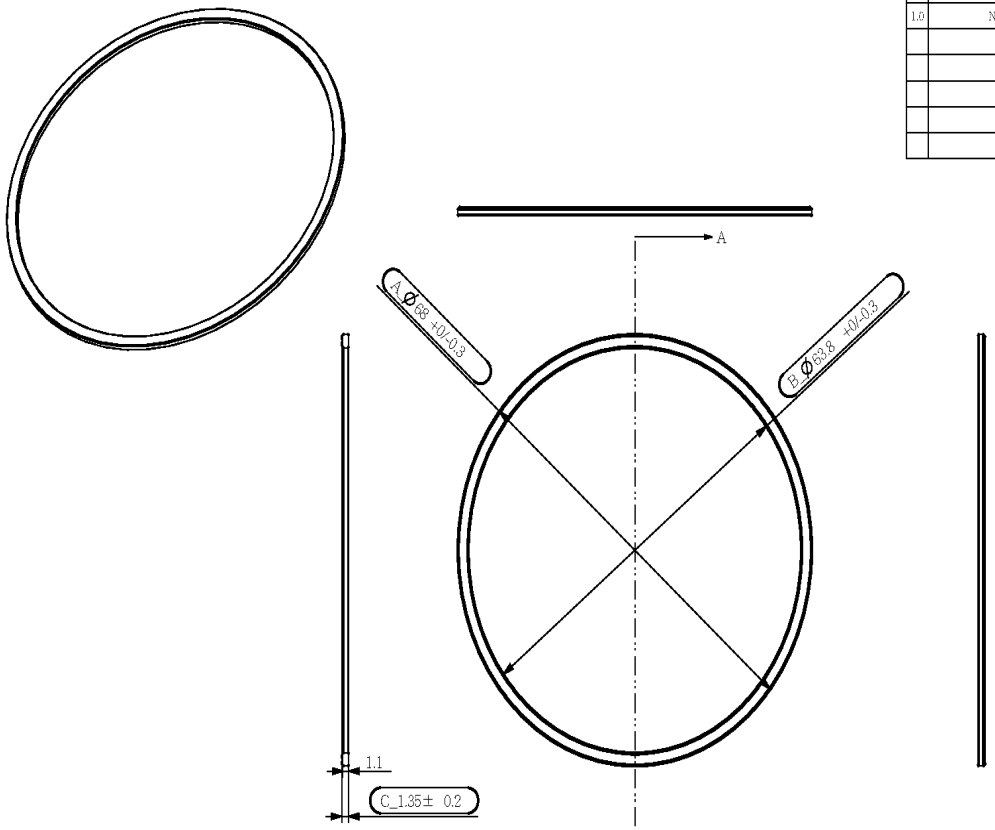
★印為社内管理項目、數値不記入檢查成績書。但、檢查項目欄中需判定。

★Marks are the items of internal control, The data don't write in the inspection record. But at Inspection Item sheet must be judge.

File E324690 Vol. X2 Sec. A112 DIA-04 Issued: 2017-04-05

機 密|CONFIDENTIAL

REVISIONS				
REV	DESCRIPTION	ENGINEER	REQUIRE	DATE
1.0	New Edition			03-Aug-16



SECTION A-A

正式圖面

注意事項:
1.材質:SILICON(TSE2186U)，具UL防火等級(94V-0)與UL 60950-22戶外環境使用規範
2.顏色:黑
3.硬度:40±10(Shore A)
4.成品表面不可有:成型不良痕跡、破損、髒汙與毛邊，外觀級別請參照圖面標示，相關檢驗細則，請依據[塑膠機構類檢驗作業規範]為標準
5.橢圓符號框選尺寸為重點檢驗尺寸(成品尺寸，非素材數值)，請依據圖面標示量測
6.參考尺寸以配合組裝為主要考量，必要時需要額外實配檢驗
7.*符號為CPK量測尺寸
8.變形量請依圖面標示或尺寸2.5%定義，毛邊<0.2mm
9.所有料件、組裝配件以及包裝之材質(此處指會隨我司成品出貨之包裝材)都需符合RoHS環保規範，並檢附相關報告(需符合歐盟2011/65/EU法規之有害物質限制含量以下規定，且不接受任何排除條款)

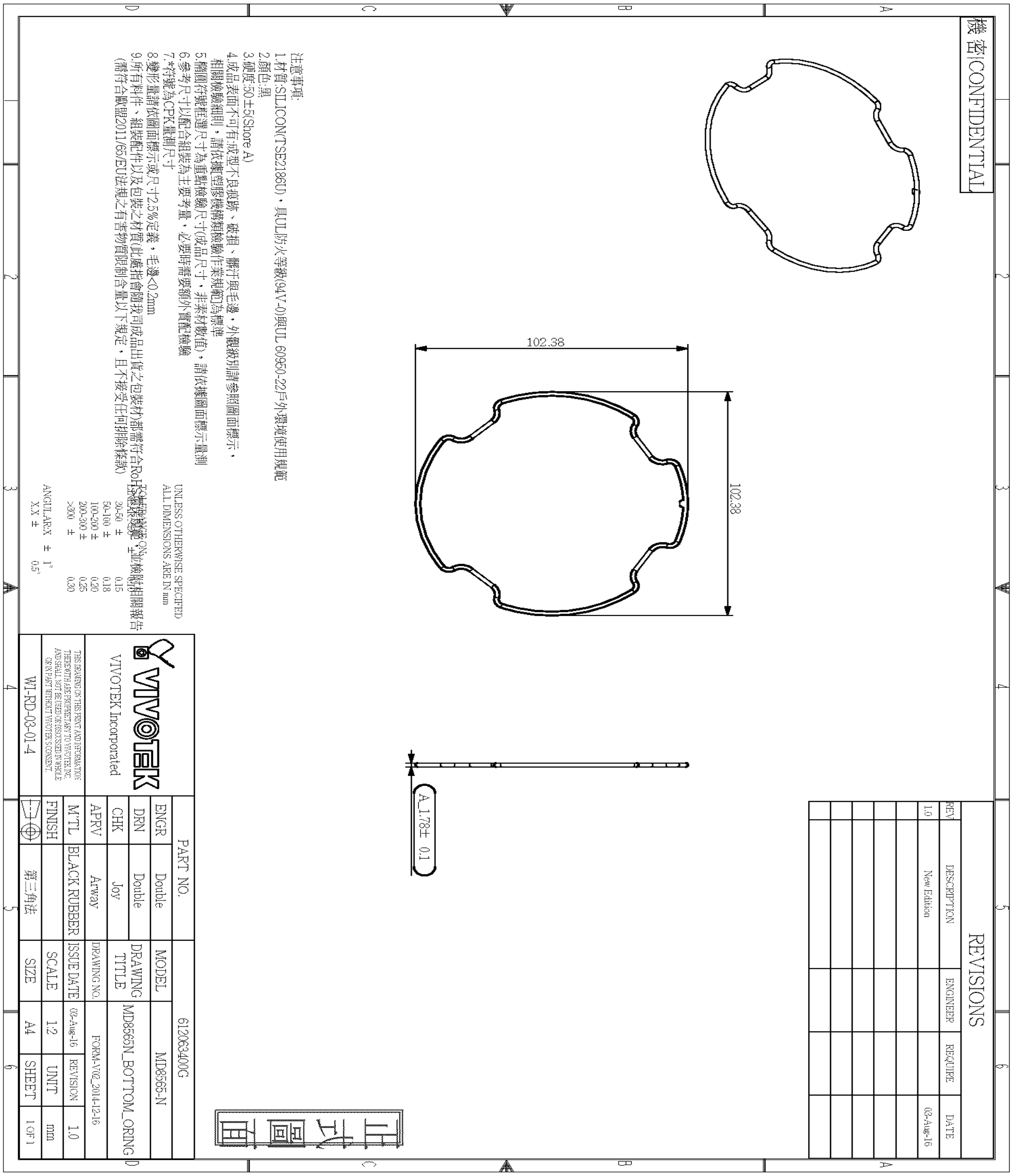
UNLESS OTHERWISE SPECIFED
ALL DIMENSIONS ARE IN mm

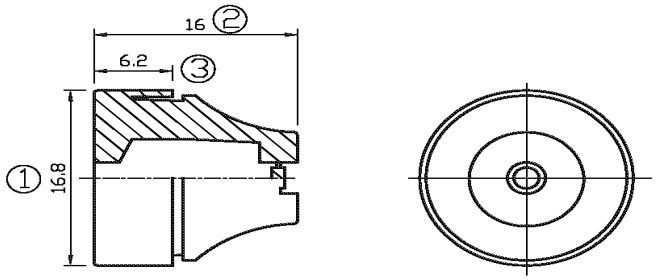
TOLERANCE ON:
LINEAR:<30 ± 0.10
30-50 ± 0.15
50-100 ± 0.18
100-200 ± 0.20
200-300 ± 0.25
>300 ± 0.30
ANGULAR:X ± 1°
X.X ± 0.5°

VIVOTEK Incorporated

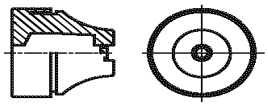
WI-RD-03-01-4

PART NO.		612063300G			
ENGR	Double	MODEL	MD8565-N		
DRN	Double	DRAWING TITLE	MD8565N_TOP_ORING		
CHK	Joy				
APRV	Arway	DRAWING NO.	FORM-V02_2014-12-16		
M'TL	BLACK RUBBER	ISSUE DATE	03-Aug-16	REVISION	1.0
FINISH		SCALE	1:1	UNIT	mm
	第三角法	SIZE	A4	SHEET	1 OF 1


機密 CONFIDENTIAL
注意事項:
1.材質:SILICON(TSE2186U),具UL防火等級(94V-0)與UL 60950-22戶外環境使用規範
2.顏色:黑
3.硬度:50±5(Shore A)
4.成品表面不可有:成型不良痕跡、破損、髒汙與毛邊,外觀級別請參照圖面標示,相關檢驗細則,請依據塑膠機構類檢驗作業規範為標準
5.關鍵符號標記尺寸為重點檢驗尺寸(成品尺寸,非素材數值),請依據圖面標示量測
6.參考尺寸以配合組裝為主要考量,必要時需要額外實配檢驗
7.*符號為CPK量測尺寸
8.變形量請依圖面標示或尺寸2.5%定義,毛邊<0.2mm
9.所有料件、組裝配件以及包裝之材質(此處指會隨該司成品出貨之包裝材)都需符合RoHS環保規範,並檢附相關報告(需符合歐盟2011/65/EU法規之有害物質限制含量以下規定,且不接受任何排除條款)
UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN mm
30-50 ± 0.15
50-100 ± 0.18
100-200 ± 0.20
200-300 ± 0.25
>300 ± 0.30
ANGULAR:X ± 1°
X.X ± 0.5°
102.38
102.38
A_1.78± 0.1
REVISIONS
REV
DESCRIPTION
ENGINEER
REQUIRE
DATE
1.0
New Edition
02-Aug-16
VIVOTEK Incorporated
WI-RD-03-01-4
PART NO.
61206400G
MODEL
MD8565-N
DRAWING TITLE
MD8565N_BOTTOM_ORING
ENGR Double
DRN Double
CHK Joy
APRV Arway
DRAWING NO.
FORM-V02_2014-12-16
M'TL BLACK RUBBER
ISSUE DATE 02-Aug-16
REVISION 1.0
FINISH
SCALE 1:2
UNIT mm
第三角法
SIZE A4
SHEET 1 OF 1
正式圖面



SCALE\2:1



SCALE\1:1

Confidential 機密文件 非授權 請勿外流

Cable Range	3.5 - 5.5 mm
Panel Hole Size	14 ± 0.25 mm
IP Ratings	IP68 - 0.2bar
Panel Thickness	1 - 4 mm
AVC Test No.	E231-103-0007-1A-1

全冠企業有限公司 AVC Industrial Corp.	INSPECTED BY	YAWEN	2014.03.05
	DRAWN BY	LING GHIOU	2014.03.05
PRODUCT: Waterproof Sealing Grommet	MATERIAL	SILVER GREY GASKET	
PART NO.: GEW14S-05-03SG			
SCALE: 2:1 / UNIT: mm / REV. 1			

TOLERANCE:
6 ↓ ±0.2 18.1~30±0.5
6.1~9±0.3 30.1~50±0.6
9.1~18±0.4 50.1~80±0.8

PATENTED

IP68

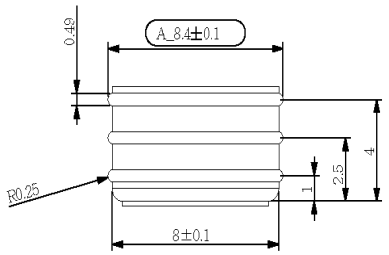
REMARK:

( )Inside reference value

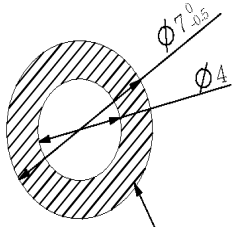
RoHS

機密|CONFIDENTIAL

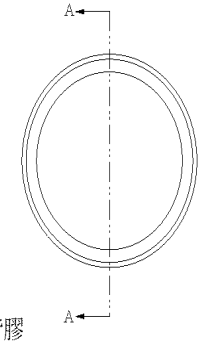
REVISIONS				
REV	DESCRIPTION	ENGINEER	REQUIRE	DATE
1.0	New Edition	Octopus		2015.07.28

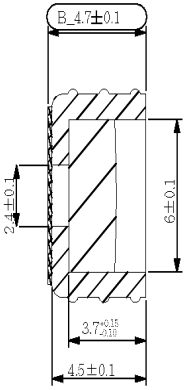


聲學篩網



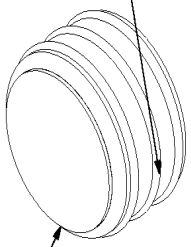
斜線區域3M 9448單面背膠





截面 A-A

麥克風橡膠(612014901G)



聲學篩網

正式圖面

注意事項:
1.聲學篩網材質:Saatifil Acoustex B032, 顏色:P877C, 厚度0.048mm
2.聲學篩網背膠型態:單面背膠(3M-9448), 含背膠厚度0.2mm
3.麥克風橡膠材質: TSE218-6U 顏色:白色, 硬度50°
4.麥克風橡膠需塗上背膠水，以利聲學篩網貼附
5.成品表面不可有:成型不良痕跡、破損、油汙與毛邊
6.橢圓符號框選尺寸為重點檢驗尺寸(成品尺寸，非素材數值)
，請依據圖面標示量測
7.參考尺寸以配合組裝為主要考量，必要時需要額外實配檢驗
8.部品需符合RoHS規範並檢附相關報告

UNLESS OTHERWISE SPECIFIED
ALL DIMENSIONS ARE IN mm

TOLERANCE ON:
LINEAR :<30 ±0.10
30-50 ±0.15
50-100 ±0.18
100-200 ±0.20
200-300 ±0.25
>300 ±0.30

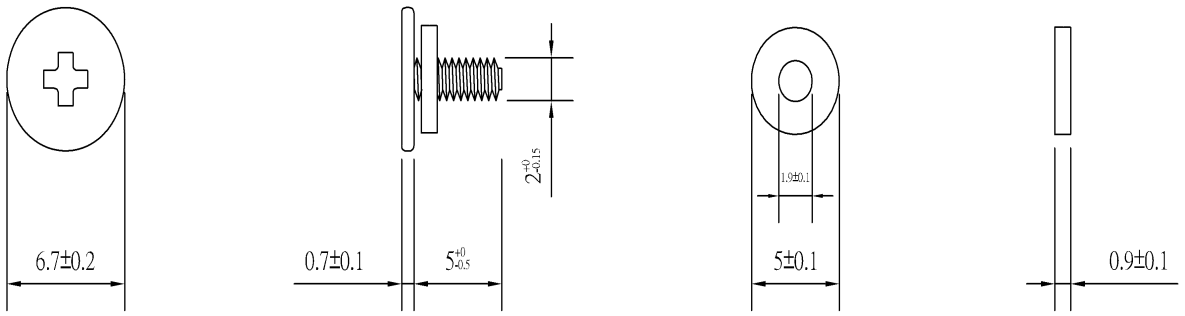
ANGULAR:X ±1°
X.X ±0.5°

VIVOTEK Incorporated

WI-RD-03-01-4

PART NO.		612042700G			
ENGR	Octopus	MODEL	DB8161-PANA		
DRN	Octopus	DRAWING TITLE	DB8161-PANA_MIC_RUBBER-MESH		
CHK	Jack				
APRV	Arway	DRAWING NO.	FORM-V02_2014-12-16		
M'TL	Acoustex B032	ISSUE DATE	2015.07.28	REVISION	1.0
FINISH		SCALE	4:1	UNIT	mm
第三角法		SIZE	A4	SHEET	1 OF 1

File E324690 Vol. X2 Sec. A112 DIA-08 Issued: 2017-04-05



金國螺絲工業有限公司	圖名	I頭M2X5機械牙+矽膠墊片1.9X5X0.9			圖號					
	材質	SUS	表面處理		日期	2016/09/12	單位	mm	比例	1:1

Test Report issued under the responsibility of:

TEST REPORT
UL 60 950-22
Information technology equipment
Safety – Part 22: Equipment to be installed outdoors

Report Reference No. ..... :	OFF- 47878403742
Date of issue ..... :	2017-02-07
Total number of pages	20
CB Testing Laboratory ..... :	UNDERWRITERS LABORATORIES TAIWAN CO LTD
Address ..... :	1ST Fl, 260 DA-YEH RD, PEI TOU DISTRICT, TAIPEI CITY, TAIWAN 112
Applicant's name ..... :	VIVOTEK INC
Address ..... :	6F, No.192, LIEN CHENG RD CHUNG HO DISTRICT, NEW TAIPEI 235, TAIWAN
Test specification:	
Standard ..... :	CSA C22.2 NO. 60950-22-07 - Edition 1 - Revision Date 2011/12/01
	UL 60950-22 - Edition 1 - Revision Date 2011/12/19
Test procedure ..... :	N/A
Non-standard test method ..... :	N/A
Test Report Form No. ..... :	IEC60950_22A
Test Report Form(s) Originator ..... :	The Standards Institution of Israel Ltd.
Master TRF ..... :	Dated 2007-03

This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.

Test item description ..... :	Network Camera
Trade Mark ..... :	VIVOTEK
Manufacturer ..... :	VIVOTEK INC
Model/Type reference ..... :	MD8565-N
Ratings ..... :	(Optional)
	44-57Vdc, 0.12-0.09A (for POE); 7.5-48Vdc, 0.82-0.13A (for adapter)

Testing procedure and testing location:	
☒ **CB Testing Laboratory:**	UNDERWRITERS LABORATORIES TAIWAN CO LTD
Testing location/ address ..... :	1ST FI, 260 DA-YEH RD, PEI TOU DISTRICT, TAIPEI CITY, TAIWAN 112
☐ **Associated CB Test Laboratory:**	
Testing location/ address ..... :	
Tested by (name + signature) ..... :	Daniel Hsueh / handler
Approved by (name + signature) . :	Chris Kao / reviewer
☐ Testing procedure: TMP	
Tested by (name + signature) ..... :	
Approved by (+ signature) ..... :	
Testing location/ address ..... :	
☐ Testing procedure: WMT	
Tested by (name + signature) ..... :	
Witnessed by (+ signature)..... :	
Approved by (+ signature) ..... :	
Testing location/ address ..... :	
☐ Testing procedure: SMT	
Tested by (name + signature) ..... :	
Approved by (+ signature) ..... :	
Supervised by (+ signature) ..... :	
Testing location/ address ..... :	
☐ Testing procedure: RMT	
Tested by (name + signature) ..... :	
Approved by (+ signature) ..... :	
Supervised by (+ signature) ..... :	
Testing location/ address ..... :	

Summary of testing:

- The manufacturer submitted representative production sample of Network Camera, model MD8565-N.

- The unit was considered exposed SELV circuit.

- The following tests were conducted according to CSA C22.2 NO. 60950-22-07 Edition 1, Revision Date 2011/12/01 & UL 60950-22 Edition 1, Revision Date 2011/12/19.

4.2.5, 4.2.1, PART 22 10.2 – IMPACT TEST

PART 22 9.1, ANNEX B – WATER SPRAY TEST

The following tests were waived:

Test	Rationale for Waiving
PART 22, 8.5, ANNEX D.2 – TENSILE STRENGTH AND ELONGATION	Refer E324690-A58

Tests performed (name of test and test clause):	Testing location:
4.2.5, 4.2.1, PART 22 10.2 – IMPACT TEST PART 22 9.1, ANNEX B – WATER SPRAY TEST	UNDERWRITERS LABORATORIES TAIWAN CO LTD/ 1ST FI, 260 DA-YEH RD, PEI TOU DISTRICT, TAIPEI CITY, TAIWAN 112.

Summary of compliance with National Differences:

Countries outside the CB Scheme membership may also accept this report.

List of countries addressed: CA, US, EU.

The product fulfils the requirements of: EN 60950-22:2006 +A11:2008.

Test item particulars ..... :	
Temperature range ..... :	-25 to 55 degree C
Overvoltage category ..... :	☐ OVC I ☐ OVC II ☐ OVC III ☐ OVC IV
IP protection class ..... :	IPX0
Possible test case verdicts:	
- test case does not apply to the test object ..... :	N/A or N
- test object does meet the requirement ..... :	P (Pass)
- test object does not meet the requirement ..... :	F (Fail)
Testing ..... :	
Date of receipt of test item ..... :	2016-01-25
Date (s) of performance of tests ..... :	2016-02-06

General remarks:

The test results presented in this report relate only to the object tested.
This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.
"(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.

This Test Report Form is intended for the investigation of safety of equipment to be installed outdoors in accordance with UL 60950-22. It can only be used together with the UL 60950-1 requirements.

Name and address of factory (ies):

VIVOTEK INC
5F, No.168, LIEN CHENG RD CHUNG HO DISTRICT, NEW TAIPEI 235, TAIWAN

General product information:

Report Summary:

All applicable tests according to the referenced standard(s) have been carried out.
Tests performed on Model MD8565-N were considered to be representative of all models.

Product Description:

The equipment is a Class III Network Camera. The EUT installs to the ceiling or wall. The power source can be from POE.

Model Difference:

N/A

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict
4	CONDITIONS FOR OUTDOOR EQUIPMENT		P
4.1	Ambient air temperature		P
	Suitability for use at any temperature in the range specified by the manufacturer. If not specified by the manufacturer, the range is taken as -33°C to +40°C	-25 to 55°C	P
4.2	AC mains supply		N
	Suitability for the highest Overvoltage Category expected in the installation location	Class III equipment.	N
	Components used to reduce the Overvoltage Category comply with IEC 61643-series		N
	Reference to installation instructions .....:		N
4.3	Rise of earth potential		
	Special earthing conditions	Class III equipment.	N
	Reference to installation instructions .....:		N
5	MARKING AND INSTRUCTIONS		P
	Special installation features for protection from conditions in the OUTDOOR LOCATION (see 1.7.2 of UL 60950-1)	Precautions in the installation instruction.	P
	OUTDOOR ENCLOSURE classification according to IEC 60529 (IP Code)	The unit is considered as outdoor equipment	N
6	PROTECTION FROM ELECTRICAL SHOCK IN AN OUTDOOR LOCATION		P
6.1	Voltage limits of user-accessible parts in OUTDOOR LOCATIONS (2.2.2 and 2.2.3 of UL 60950-1 with voltage limits of UL60950-22)		P
	Voltages under normal conditions (V) .....:	Accessible parts are less than 21.2 Vp or 30Vdc and are classified as SELV.	P
	Voltages under fault conditions (V).....:	Single fault did not cause excessive voltage in accessible SELV circuits. Limits of 15 V a.c., 21,2 V peak, or 30 V d.c. for longer than 0,2 s under single fault conditions.	P
6.2	Limited current circuits in outdoor locations		N
	The requirements of 2.4 of UL60950-1 apply without change		N

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict
7	WIRING TERMINALS FOR CONNECTION OF EXTERNAL CONDUCTORS		N
	The mains supply terminations powered via the normal building installation wiring are as specified in 3.3 of UL 60950-1	Not directly connected to mains.	N
	The mains supply terminations powered directly from the mains distribution system are as specified in IEC 60364	Not directly connected to mains.	N
8	CONSTRUCTION REQUIREMENTS FOR OURDOOR ENCLOSURES		P
8.1	General		P
	Protection against corrosion by use of suitable materials or by application of a protective coating	Metallic enclosure was made of aluminium.	P
	Parts serving as a functional part of an OUTDOOR ENCLOSURE (e.g., dials, connectors, etc.) comply with the same environmental protection requirements as for the OUTDOOR ENCLOSURE	All relevant parts comply with applicable requirements	P
	Use of OUTDOOR ENCLOSURE to carry current during normal operation	Outdoor enclosure does not carry current during normal operation.	P
	Connection of a conductive part of an OUTDOOR ENCLOSURE to protective earth for carrying fault currents (see 2.6 of UL 60950-1 and 8.3 of this standard)		N
8.2	Resistance to ultra-violet radiation		N
	Resistance of non-metallic parts of an outdoor enclosure to degradation by ultra-violet (UV) radiation		N
	Parts providing mechanical support:		N
	Tensile strength test (ISO 527)		N
	Flexural strength test (ISO 178)		N
	Parts providing impact resistance:		N
	Charpy impact test (ISO 179)		N
	Izod impact test (ISO 180)		N
	Tensile impact test (ISO 8256)		N
	All parts:		N
	Flammability classification (1.2.12 and annex A of UL 60950-1)		N
8.3	Resistance to corrosion		P

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict
8.3.1	General	Metallic enclosure was made of aluminum and after evaluated/reviewed the data provided from manufacturer, the construction complied with requirements.	P
	Resistance of metallic parts of an OUTDOOR ENCLOSURE to the effects of water-borne contaminants		N
	Alternate method for 8.3.2-8.3.4 (IEC 61587-1)		N
8.3.2	Test apparatus		N
	Salt-spray test (IEC 60068-2-11)		N
	Test in a water-saturated sulphur dioxide atmosphere (water-saturated sulphur dioxide atmosphere as described in Annex A; chamber as described in ISO 3231)		N
8.3.3	Test procedure		N
8.3.4	Compliance criteria		N
8.4	Bottoms of FIRE ENCLOSURES		N
	Comply with 4.6.2 of UL 60950-1	No bottom opening.	N
	Bottom of FIRE ENCLOSURE of OUTDOOR EQUIPMENT mounted directly and permanently on a non-combustible surface (e.g., concrete or metal)		N
8.5	Gaskets		P
	If gaskets are used as the method for protection against the ingress of potential contaminants, requirements of 8.5.1 through 8.5.3 apply	Refer to Report No. E324690-A58 for test result in detail.	P
8.5.1	General		N
8.5.2	Oil resistance		N
8.5.3	Securing means	mechanical means used	P
9	PROTECTION OF EQUIPMENT WITHIN AN OUTDOOR ENCLOSURE		P
9.1	Protection from moisture (see Table 2)	After test, no water has entered to enclosure.	P
9.2	Protection from plants and vermin	No openings on the enclosure.	N
9.3	Protection from excessive dust		N

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict
10	MECHANICAL STRENGTH OF ENCLOSURES		P
10.1	General		P
10.2	Impact test (4.2.5 of UL 60950-1)	(see separate test report UL 60950-1)	P
	Compliance criteria:		P
	- after test the level of protection remains in accordance with 9.1of this standard		P
	- after test the requirements of 4.2.1 of UL 60950-1 are met		P
11	OUTDOOR EQUIPMENT CONTAINING VENTED BATTERIES		N
	Adequate ventilation in the compartment housing a vented battery, where gassing is possible during normal usage or over-charging	No such battery was provided.	N
	Protection against the risk of ignition of local concentrations of hydrogen and oxygen in a compartment containing both a battery and electrical components		N
	Hydrogen gas concentration measurement test		N
	Measured hydrogen gas concentration (% by volume) .....:		—
	Max. allowed gas concentration for the mixture location in proximity to an ignition source (% by volume) .....:		—
	Max. allowed gas concentration for the mixture location not in proximity to an ignition source (% by volume) .....:		—
	Overcharging of rechargeable battery (see 4.3.8 of UL 60950-1)		N
A	ANNEX A, WATER-SATURATED SULPHUR DIOXIDE ATMOSPHERE (see 8.3.2 and 8.3.3)		N
B	ANNEX B, WATER SPRAY TEST (see 9.1)		P
C	ANNEX C, ULTRAVIOLET LIGHT CONDITIONING TEST (see 8.2)		N
C.1	Test apparatus .....:		N
C.2	Mounting of test samples .....:		N
C.3	Carbon-arc light-exposure apparatus .....:		N
C.4	Xenon-arc light-exposure apparatus .....:		N

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict
D	ANNEX D, GASKET TESTS (see 8.5)		P
D.1	Gasket tests		P
D.2	Tensile strength and elongation tests (for gaskets that can stretch)	Refer to Report No. E346792-A58 for test result in detail.	P
	Tensile strength (%) .....:		N
	Elongation (%) .....:		N
	Visible deterioration, deformation, melting, cracking or hardening of the material.....:	There was no visible cracking or other adverse effect of the conditioned material.	P
D.3	Compression test (for gaskets with closed cell construction)		N
	Initial thickness of the specimen (mm) .....:		N
	Thickness of the specimen after test a) (mm), compression set after test a) (%).....:		N
	Thickness of the specimen after test b) (mm), compression set after test b) (%).....:		N
	Thickness of the specimen after test c) (mm), compression set after test c) (%).....:		N
	Visible cracks or deterioration .....:		N
D.4	Oil immersion test		N
	Swelling (%).....:		N
	Shrinking (%).....:		N

E	ANNEX E, RATIONALE		—
E.1	General		—
E.2	Electric shock		—
E.3	Energy related hazards		—
E.4	Fire		—
E.5	Mechanical hazards		—
E.6	Heat related hazards		—
E.7	Radiation		—
E.8	Chemical hazards		—
E.9	Biological hazards		—
E.10	Explosion hazards		—

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

IEC 60950-22:2005 – COMMON MODIFICATIONS		
Contents	Add the following annexes: Annex ZA (normative) Normative references to international publications with their corresponding European publications Annex ZB (normative) Special national conditions	N
General	Delete all the "country" notes in the reference document according to the following list: 4.1 Note 3 4.3 Note 8.5 Note 10.2 Note D.3 Note D.4 Note	N

ZA	NORMATIVE REFERENCES TO INTERNATIONAL PUBLICATIONS WITH THEIR CORRESPONDING EUROPEAN PUBLICATIONS	—

ZB	SPECIAL NATIONAL CONDITIONS		N
4.1	In **Finland**, **Norway** and **Sweden**, the temperature in winter may be extremely low. For OUTDOOR EQUIPMENT this will demand special design so that the equipment can withstand transport, erection and operation/service at temperatures down to -50°C	This National Condition has been removed in EN 60950-22:2006 + A11:2008.	N
10.2	In **Finland**, **Norway** and **Sweden** there are additional requirements for the minimum ambient temperature. See 4.1 of this annex.	This National Condition has been removed in EN 60950-22:2006 + A11:2008.	N
D.3	In **Finland**, **Norway** and **Sweden** there are additional requirements for the minimum ambient temperature. See 4.1 of this annex.	This National Condition has been removed in EN 60950-22:2006 + A11:2008.	N

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

8.2	TABLE: Resistance to ultra-violet radiation	
8.2a)	Tensile strength test (ISO 527)	N
Material identification (manufacturer, type designation) .....:		—
Shape and dimensions of test samples.....:		—
Conditioning for Set 1 of samples.....:		—
Conditioning for Set 2 of samples (including Annex C) .....:		—
Test conditions (T °C, RH %) .....:		—

Set 1 (without Annex C conditioning)		Set 2 (after Annex C conditioning)	
Test sample #	Tensile strength (MPa)	Test sample #	Tensile strength (MPa)

Arithmetic mean for Set 1 (MPa)	
Arithmetic mean for Set 2 (MPa)	
Retention (%)	

Supplementary information:

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

8.2	**TABLE: Resistance to ultra-violet radiation**		
8.2b)	Flexural strength test (ISO 178)		N
Material identification (manufacturer, type designation) .....:			—
Shape and dimensions of test samples.....:			—
Conditioning for Set 1 of samples.....:			—
Conditioning for Set 2 of samples (including Annex C) .....:			—
Test conditions (T °C, RH %) .....:			—

Set 1 (without Annex C conditioning)		Set 2 (after Annex C conditioning)	
Test sample #	Flexural strength (MPa)	Test sample #	Flexural strength (MPa)

Arithmetic mean for Set 1 (MPa)	
Arithmetic mean for Set 2 (MPa)	
Retention (%)	

Supplementary information:

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

8.2	**TABLE: Resistance to ultra-violet radiation**	
8.2c)	Charpy impact test (ISO 179) - unnotched	N
Material identification (manufacturer, type designation) .....:		—
Shape and dimensions of test samples.....:		—
Conditioning for Set 1 of samples.....:		—
Conditioning for Set 2 of samples (including Annex C) .....:		—
Test method (according to Tables 2 and 3 of ISO 179) .....:		—
Test conditions (T °C, RH %) .....:		—

Set 1 (without Annex C conditioning)		Set 2 (after Annex C conditioning)	
Test sample #	Charpy impact strength (kJ/m^2)	Test sample #	Charpy impact strength (kJ/m^2)

Arithmetic mean for Set 1 (kJ/m^2) ..... :	
Arithmetic mean for Set 2 (kJ/m^2) ..... :	
Retention (%) ..... :	

Supplementary information:

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

8.2	**TABLE: Resistance to ultra-violet radiation**	
8.2d)	Charpy impact test (ISO 179) - notched	N
Material identification (manufacturer, type designation) .....:		—
Shape and dimensions of test samples.....:		—
Conditioning for Set 1 of samples.....:		—
Conditioning for Set 2 of samples (including Annex C) .....:		—
Test method (according to Tables 2 and 3 of ISO 179) .....:		—
Test conditions (T °C, RH %) .....:		—

Set 1 (without Annex C conditioning)		Set 2 (after Annex C conditioning)	
Test sample #	Charpy impact strength (kJ/m^2)	Test sample #	Charpy impact strength (kJ/m^2)

Arithmetic mean for Set 1 (kJ/m^2) ..... :	
Arithmetic mean for Set 2 (kJ/m^2) ..... :	
Retention (%) ..... :	

Supplementary information:

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

8.2	**TABLE: Resistance to ultra-violet radiation**	
8.2e)	Izod impact test (ISO 180) - unnotched	N
Material identification (manufacturer, type designation) .....:		—
Shape and dimensions of test samples.....:		—
Conditioning for Set 1 of samples.....:		—
Conditioning for Set 2 of samples (including Annex C) .....:		—
Test method (according to Table 1 of ISO 180) .....:		—
Test conditions (T °C, RH %) .....:		—

Set 1 (without Annex C conditioning)		Set 2 (after Annex C conditioning)	
Test sample #	Izod impact strength (kJ/m^2)	Test sample #	Izod impact strength (kJ/m^2)

Arithmetic mean for Set 1 (kJ/m^2) .....:	
Arithmetic mean for Set 2 (kJ/m^2) .....:	
Retention (%) .....:	
Supplementary information:	

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

8.2	TABLE: Resistance to ultra-violet radiation	
8.2f)	Izod impact test (ISO 180) - notched	N
Material identification (manufacturer, type designation) .....:		—
Shape and dimensions of test samples.....:		—
Conditioning for Set 1 of samples.....:		—
Conditioning for Set 2 of samples (including Annex C) .....:		—
Test method (according to Table 1 of ISO 180) .....:		—
Test conditions (T °C, RH %) .....:		—

Set 1 (without Annex C conditioning)		Set 2 (after Annex C conditioning)	
Test sample #	Izod impact strength (kJ/m^2)	Test sample #	Izod impact strength (kJ/m^2)

Arithmetic mean for Set 1 (kJ/m^2) ..... :	
Arithmetic mean for Set 2 (kJ/m^2) ..... :	
Retention (%) ..... :	

Supplementary information:

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

8.2	TABLE: Resistance to ultra-violet radiation	
8.2g)	Tensile impact test (ISO 8256) - unnotched	N
Material identification (manufacturer, type designation) ..... :		—
Shape and dimensions of test samples..... :		—
Conditioning for Set 1 of samples..... :		—
Conditioning for Set 2 of samples (including Annex C) ..... :		—
Test method (A or B)		—
Test conditions (T °C, RH %) ..... :		—

Set 1 (without Annex C conditioning)		Set 2 (after Annex C conditioning)	
Test sample #	Tensile impact strength (kJ/m^2)	Test sample #	Tensile impact strength (kJ/m^2)

Arithmetic mean for Set 1 (kJ/m^2) ..... :	
Arithmetic mean for Set 2 (kJ/m^2) ..... :	
Retention (%) ..... :	

Supplementary information:

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

8.2	TABLE: Resistance to ultra-violet radiation	
8.2h)	Tensile impact test (ISO 8256) – notched	N
Material identification (manufacturer, type designation) .....:		—
Shape and dimensions of test samples.....:		—
Conditioning for Set 1 of samples.....:		—
Conditioning for Set 2 of samples (including Annex C) .....:		—
Test method (A or B) .....:		—
Test conditions (T °C, RH %) .....:		—

Set 1 (without Annex C conditioning)		Set 2 (after Annex C conditioning)	
Test sample #	Tensile impact strength (kJ/m^2)	Test sample #	Tensile impact strength (kJ/m^2)

Arithmetic mean for Set 1 (kJ/m^2) ..... :	
Arithmetic mean for Set 2 (kJ/m^2) ..... :	
Retention (%) ..... :	

Supplementary information:

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

List of test equipment used:
(Note: This is an example of the required attachment. Other forms with a different layout but containing similar information are also acceptable.)

Clause	Measurement / testing	Testing / measuring equipment / material used	Range used	Calibration date

UL 60950-22			
Clause	Requirement + Test	Result - Remark	Verdict

ATTACHMENT

US - UL60950-22, First Edition - SPECIAL NATIONAL CONDITIONS			
4	Applicable parts of Chapter 8 of the NEC may be applicable to ITE installed outdoors with connections to communication systems		P
4.2	Power supply cords are to be suitable outdoor use type as required by Section 400-4 of the NEC, i.e., marked "water resistant," "outdoor," "W" or "W-A."		N
4.2	Surge Arrestors and Transient Voltage Surge Suppressors installed external to the ITE are required to comply with the appropriate NEC requirements.		N
5	Outdoor Enclosures are required to be classified and marked in accordance with UL 50		N
7	Applicable parts of the NEC, NFPA 70; and the National Electrical Safety Code, ANSI/IEEE C2, are required, as appropriate.		N
7	Wiring terminals intended to supply Class 2 outputs are required per Article 725 of the NEC to be marked.		N
11	Requires stationary installations of storage batteries external to the ITE to comply with Article 480 of the NEC		N
OTHER DIFFERENCES			
1.2	For protection of ITE against direct lightning strikes, reference is made to NFPA 780 for additional requirements.		P
2	All references to IEC 60950-1 in this standard are replaced by the equivalent UL 60950-1 Standards. All relevant Standards referenced in the Part 1 Standard (Annex P, including P.1 and P.2) also apply to this Part 22 Standard and are not listed below. All references to clauses and subclauses in IEC 60950-1 are to the second edition.		P

Test Record No. 1

- The manufacturer submitted representative production samples of Network Camera, Model MD8565-N.

- All tests except for Impact Test and Water Spray Test were conducted at Audix Technology Corp., located at Nei-Hu, Taipei under TPTDP program.

- Impact Test and Water Spray Test were conducted at UL lab in Taiwan.

- Test results reported relate only to the items tested.

The following tests were conducted:

Test	Testing Location/Comments
End Product Reference Page	
General Guidelines	
Input: Single-Phase (1.6.2)	
SELV Reliability Test Including Hazardous Voltage Measurements (2.2.2, 2.2.3, 2.2.4, Part 22 6.1)	
Limited Power Source Measurements (2.5)	
Steady Force (4.2.1 - 4.2.4)	
Impact (4.2.5, 4.2.1, Part 22 10.2)	"UL"
Stress Relief (4.2.7, 4.2.1)	
Loading - Wall and Ceiling Mounted Equipment (4.2.10)	
Heating (4.5.1, 1.4.12, 1.4.13)	
Electric Strength (5.2.2)	
Component Failure (5.3.1, 5.3.4, 5.3.7)	
Abnormal Operation (5.3.1 - 5.3.9)	
Overload of Operator Accessible Connector (5.3.7)	
Water Spray (Part 22 9.1, Annex B)	"UL"

Test results are valid only for the tested equipment. These tests are considered representative of the products covered by this Test Report. The test methods and results of the above tests have been reviewed and found to be in accordance with the requirements in the Standard(s) referenced at the beginning of this Test Report.

The following tests were waived:

Test	Rationale for Waiving
Tensile Strength and Elongation (Part 22 8.5, Annex D.2)	Refer to E324690-A58

The following supplements are provided as a part of this Test Record. NOTE: These supplements are only available to the Applicant via the CDA system.

Type	Supplement Id	Description
Attachment	2-01	DataSheet
Attachment	2-02	CRD

Test Record No. 2

- The manufacturer submitted representative production samples of Network Camera, Model MD8565-N, employing alternate IRLED board type B.

- All tests were conducted at Audix Technology Corp., located at Nei-Hu, Taipei under TPTDP program.

- Only limited tests were considered necessary based upon previous investigation.

- Test results reported relate only to the items tested.

The following tests were conducted:

Test	Testing Location/Comments
End Product Reference Page	
General Guidelines	
Input: Single-Phase (1.6.2)	
Heating (4.5.1, 1.4.12, 1.4.13)	

Test results are valid only for the tested equipment. These tests are considered representative of the products covered by this Test Report. The test methods and results of the above tests have been reviewed and found to be in accordance with the requirements in the Standard(s) referenced at the beginning of this Test Report.

The following supplements are provided as a part of this Test Record. NOTE: These supplements are only available to the Applicant via the CDA system.

Type	Supplement Id	Description
Datasheet	2-03	DataSheet for 60950
Datasheet	2-04	DataSheet for 60950-22 (For Test Record No. 1)
Attachment	2-05	CRD