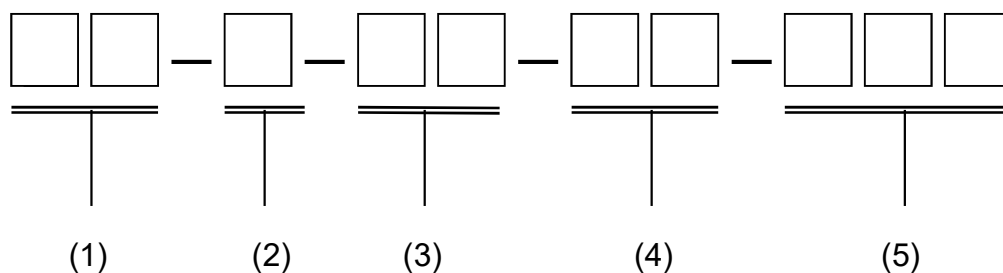C

1. Explanation of part number :

(1)   (2)   (3)   (4)   (5)

 (1) Product type : Monopole

 (2) Material : PC

 (3) Frequency :   2.4GHz-2.5GHz/4.8GHz-6.0GHz

 (4) Model name : 7B0911V00-G1J-G

2. Electrical Specification :

 Those specifications were specially defined for **USB Dongle** model, and all characteristics were measured under the model's handset testing.

2-1. Frequency Band:

Band	Frequency (GHz)
Dual Band	2.4GHz-2.5GHz/4.8GHz-6.0GHz

2-2. Impedance

 50 ohm nominal

2-3. Measurement method and description :

UNLESS OTHER SPECIFIED TOLERANCES ON： X＝N/A X.X＝N/A X.XX＝N/A ANGLES＝N/A HOLEDIA＝N/A	**FOXCONN**	
SCALE：N/A UNIT：mm		
DRAWN BY : CHECKED BY:		
DESIGNED BY: APPROVED BY:		
TITLE：Embedded Dual-Band Antenna for USB Dongle	DOCUMENT NO.	SPEC REV. P0

2-3.1Test Instruments

Device & Model No.	Device Picture	Manufacturer
GTS1800		GTS
CMW500		ROHDE&S CHWARZ

2-3.2 Test Setup

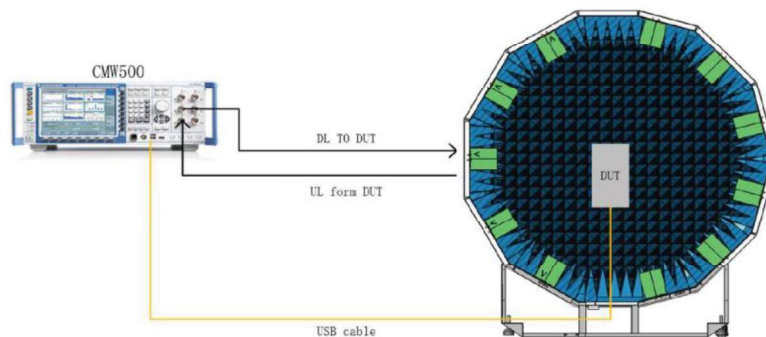## 1）. Test connection diagram

Figure 1 BLE DTM test connection diagram

During the test, the DUT should be connected to CMW500 using USB line. And USB driver should be installed in the CMW500. The DUT will rotated 360 degree with usb line during the test.

UNLESS OTHER SPECIFIED TOLERANCES ON：		
X＝N/A X.X＝N/A X.XX＝N/A		
ANGLES＝N/A HOLEDIA＝N/A		
SCALE：N/A	UNIT：mm	
DRAWN BY :	CHECKED BY:	
DESIGNED BY:	APPROVED BY:	

FOXCONN

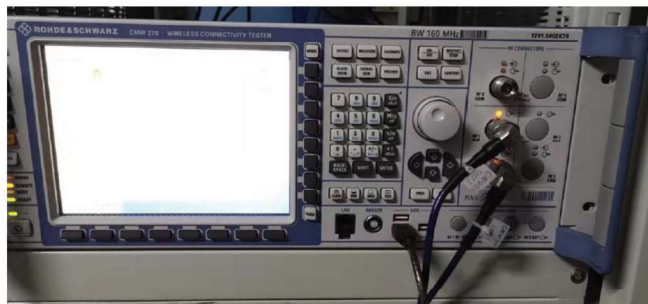| TITLE：Embedded Dual-Band Antenna for USB Dongle	DOCUMENT NO.		SPEC REV. P0

Figure 2 CMW500 USB and RF port connection

2）. Test template Setting

CMW500 setting, choose EUT Comm Protocol, HCI or two(2 wire) according DUT setting, and baud rate generally set with 115200. COM4 will be displaded when BT LE signal is on.If not, check if the driver is installed successfully(check unrecognized device in the device manager).

3）. Test template Setting

Test Procedure

1）Double click the icon to open the software.

2）Click "Set up" to open set up page, choose R8S CMW500 under menu of Equipment>instrument.

3）Click "templates" to enter the testing interface, select WIFI test template.

⊿ WIFI.bch
☐ TP_R8SCMW500_WiFi_TRP_a L.xml
☐ TP_R8SCMW500_WiFi_TRP_a M.xml
☐ TP_R8SCMW500_WiFi_TRP_a H.xml
☐ TP_R8SCMW500_WiFi_TRP_b L.xml
☐ TP_R8SCMW500_WiFi_TRP_b M.xml
☐ TP_R8SCMW500_WiFi_TRP_b H.xml
☐ TP_R8SCMW500_WiFi_TRP_an L.xml
☐ TP_R8SCMW500_WiFi_TRP_an M.xml
☐ TP_R8SCMW500_WiFi_TRP_an H.xml
☐ TP_R8SCMW500_WiFi_TRP_g L.xml
☐ TP_R8SCMW500_WiFi_TRP_g M.xml
☐ TP_R8SCMW500_WiFi_TRP_g H.xml
☐ TP_R8SCMW500_WiFi_TRP_gn L.xml

UNLESS OTHER SPECIFIED TOLERANCES ON：		
X＝N/A X.X＝N/A X.XX＝N/A		
ANGLES＝N/A HOLEDIA＝N/A		
SCALE：N/A	UNIT：mm	
DRAWN BY :	CHECKED BY:	
DESIGNED BY:	APPROVED BY:	

TITLE：Embedded Dual-Band Antenna for USB Dongle	DOCUMENT NO.		SPEC REV. P0

4）. Enter the parameter setting interface and click start.

Parameters (R8S_CMW500/WIFI/TRP)
- Link Setup
  - Auto Answer : False
  - Operation Mode : AP
  - Output Attenuation :   dB
  - Input Attenuation :   dB
  - TX Burst Power : -50 dBm
  - Expected Nominal Power : 25 dBm
  - Rate Automatic : False
  - TRP Data Rate : 54 Mbps
  - Packet Generator Protocol : ICMP
  - SSID : GTSWIFI
  - StandAlone Enable : False
  - Dual Channel Amplifier : True
  - RF Input(RX) : RF1COM
  - RF Output(TX) : RF1OUT
- Station Test Setting
  - MAC Address : 106F3F23D228 hex
  - IP Address Stack : 192.168.11.1
  - IP Address Destination : 192.168.11.8
  - Subnet Mask : 255.255.255.0
  - Default Gateway : 192.168.11.1
  - DNS Server : 0.0.0.0
  - DHCP : ON
  - Security Mode : Disable
  - Pass LastDigit : 8   1234567*
- Test Setup
  - Alternate File :   [Select] [Clear]
  - Alternate Point(s) Count(0 meas no alternate) : 2
  - Alternate Switch Delay : 5 s
  - BasicRate Enable : False
  - Free Run Mode : False
  - MFR Ctrl Enable : False
  - DFR Ctrl Enable : False
  - Ack Eirp : False

UNLESS OTHER SPECIFIED TOLERANCES ON：			
X＝N/A X.X＝N/A X.XX＝N/A			
ANGLES＝N/A HOLEDIA＝N/A			
SCALE：N/A	UNIT：mm		
DRAWN BY :	CHECKED BY:		
DESIGNED BY:	APPROVED BY:		
TITLE：Embedded Dual-Band Antenna for USB Dongle	DOCUMENT NO.		SPEC REV. P0

5）The DUT placed in the center of the chamber, connect the computer to WIFI signal named "GTSWIFI" of the chamber and no password is needed. Noted that the WIFI signal will be fined until test is started on step 4).

6）Closed the door of chamber and click "OK".

7）Test result listed on the DUT interface, left click the mouse to copy

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2-4. VSWR DATA:

	Frequency	ANT1	ANT1
VSWR(驻波比)（max）	2.4GHZ-2.5GZH	2.6	7.8
	4.8GHZ-6.0GHZ	4.8	7
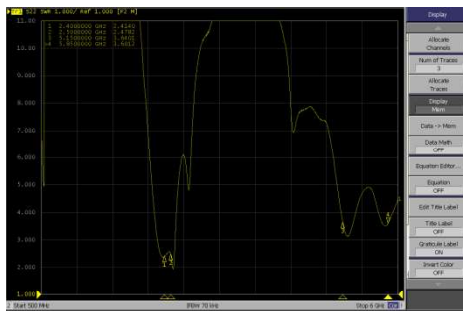
ANT1:

Frquency(MHz)	3D Gain(dBi)	Efficiency	Peak Gain(dBi)
2400	-5.5	28	-1.2
2450	-4.1	39	1.1
2500	-5.7	27	1.2
5150	-6.3	23	-1.1
5250	-4.6	35	-0.8
5350	-4.4	36	-0.1
5470	-5.5	28	-0.6
5600	-5.6	28	1.0
5725	-4.8	33	0.9
5785	-4.3	37	1.1
5850	-4.1	39	1.2

Frquency:2450MHZ

Frquency:5300MHZ

UNLESS OTHER SPECIFIED TOLERANCES ON：		
X＝N/A X.X＝N/A X.XX＝N/A		
ANGLES＝N/A HOLEDIA＝N/A		

FOXCONN

SCALE：N/A	UNIT：mm
DRAWN BY :	CHECKED BY:
DESIGNED BY:	APPROVED BY:

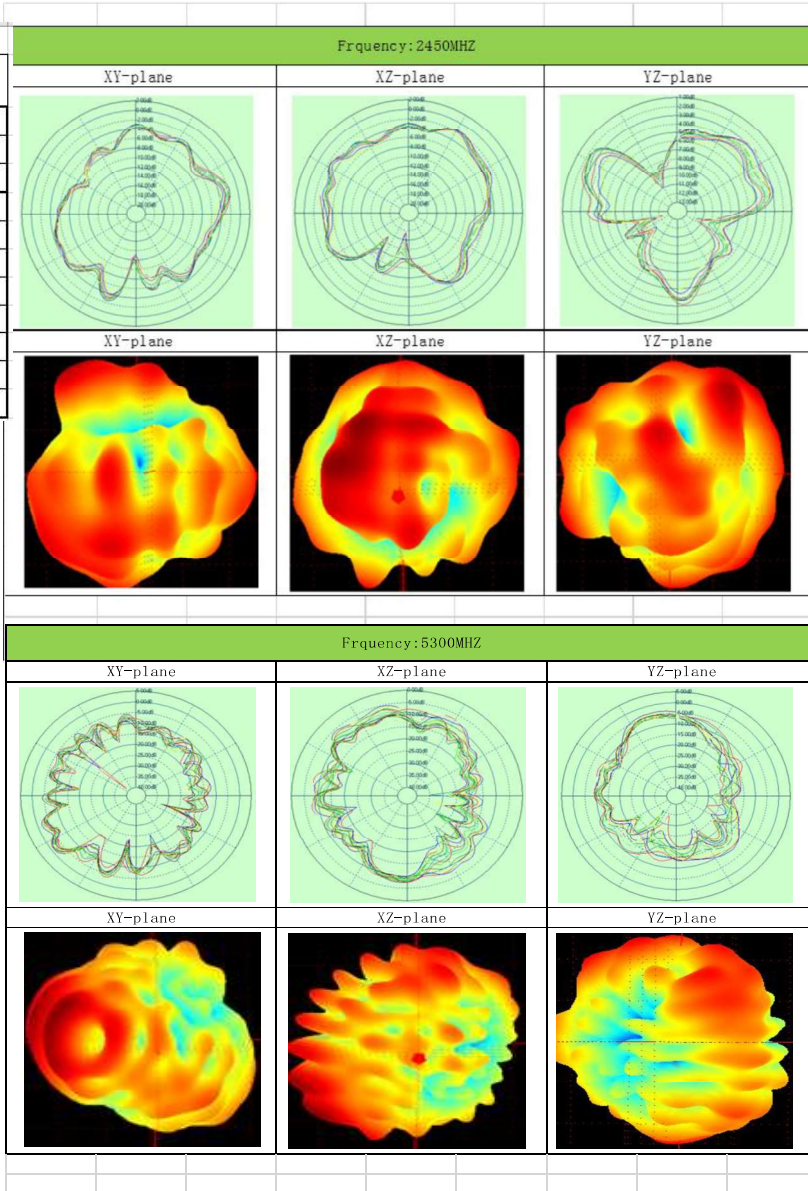| TITLE：Embedded Dual-Band Antenna for USB Dongle	DOCUMENT NO.		SPEC REV.
			P0

ANT2:			
Frquency(MHz)	3D Gain(dBi)	Efficiency	Peak Gain(dBi)
2400	-5.4	29	-0.2
2450	-5.6	28	-0.4
2500	-6.1	25	-1.1
5150	-5.7	27	-1.5
5250	-5.3	30	-0.6
5350	-5.4	29	1.2
5470	-8.8	13	-3.8
5600	-9.7	11	-4.6
5725	-10.1	10	-5.7
5785	-10.4	9	-6.2
5850	-10.7	9	-4.5

Frquency:2450MHZ

XY-plane	XZ-plane	YZ-plane

XY-plane	XZ-plane	YZ-plane

Frquency:5300MHZ

XY-plane	XZ-plane	YZ-plane

XY-plane	XZ-plane	YZ-plane

UNLESS OTHER SPECIFIED TOLERANCES ON：

X＝N/A　　　　X.X＝N/A　　　　X.XX＝N/A

ANGLES＝N/A　　　　HOLEDIA＝N/A

SCALE：N/A	UNIT：mm
DRAWN BY :	CHECKED BY:
DESIGNED BY:	APPROVED BY:

FOXCONN

TITLE：Embedded Dual-Band Antenna for USB Dongle	DOCUMENT NO.		SPEC REV. P0

Mechanical Specification:
3. Mechanical Configuration:
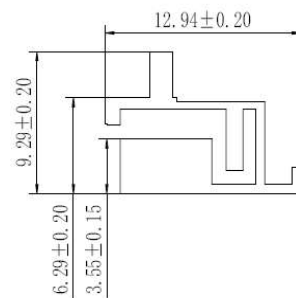
NOTES:
1. 丝印颜色：近似PANTONE 8371C；
2. 镭雕后外观无漏印，针孔，断开等不良；
3. 环保要求:所用物料满足环保要求

丝印字符方向，以产品底部大平面为基准，方向与基准正方向一致

REV.	Description	Date	Owner
A0	New drawing	2022.01.29	

FOXCONN

USB Holder丝印
(ASUS)

MATERIAL: PC 1414
FINISH: NONE

TITLE：Embedded Dual-Band Antenna for USB Dongle

DOCUMENT NO.

SPEC REV.
P0

Figure 3-1-1 The antenna drawing

ITEM	DESCRIPTION	MATERIAL SPECIFICATION	QUANTITY	UNIT
1	USB DONGLE	Sabic 1414 T with Cu,Ni Plating and Silk Print	1	PCS

SCALE：N/A	UNIT：mm
DRAWN BY :	CHECKED BY:
DESIGNED BY:	APPROVED BY:

H FOXCONN

TITLE：Embedded Dual-Band Antenna for USB Dongle	DOCUMENT NO.		SPEC REV. P0

NOTES:
1. 丝印颜色: 近似PANTONE 8371C;
2. 丝印后外观无糊印、针孔、断开等不良;
3. 环保要求:所用物料满足环保要求

4.78±0.05

14.10±0.10

14.90±0.15
12.09±0.05
11.60±0.05

* 1.80±0.05
4.60±0.05
4.70±0.05
* 7.10±0.10

7.00±0.05

1.95±0.05
0.84 +0.04 -0.02 *

8.20±0.10 *

截面 A-A
比例 2:1

3D VIEW

丝印字符方向,字符与
产品大平面方向一致

ITEM NO.
PART OR IDENTIFYING NO.
NOMENCLATURE OR DESCRIPTION
MATERIAL SPECIFICATION
QTY REQD

PARTS LIST

CHOOSE CLASS
SPEC.
< 8mm
8 - 25mm
25 - 80mm
80 - 250mm
ANGLE

Tolerance	A	B	C	D
< 8mm	0.05	0	0.1	0.2
8 - 25mm	0.08	0.15	0.15	0.3
25 - 80mm	0.12	0.2	0.25	0.4
80 - 250mm	0.25	0.3	0.4	0.6
ANGLE	0.5			

MATERIAL: PC 1414
FINISH: NONE

CAD GENERATED DRAWING
DO NOT MANUALLY UPDATE

APPROVALS   DATE
DRAWN
CHECKED
RESP ENG   NONE
QUAL ENG   NONE

SCALE   UNIT:mm

SIZE A4   DWG. NO.
CAD FILE:

SHEET   OF   REV.

USB Holder(ASUS)

UNLESS OTHER SPECIFIED TOLERANCES ON :
X＝N/A   X.X＝N/A   X.XX＝N/A
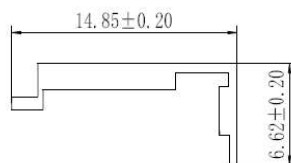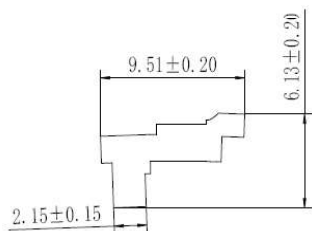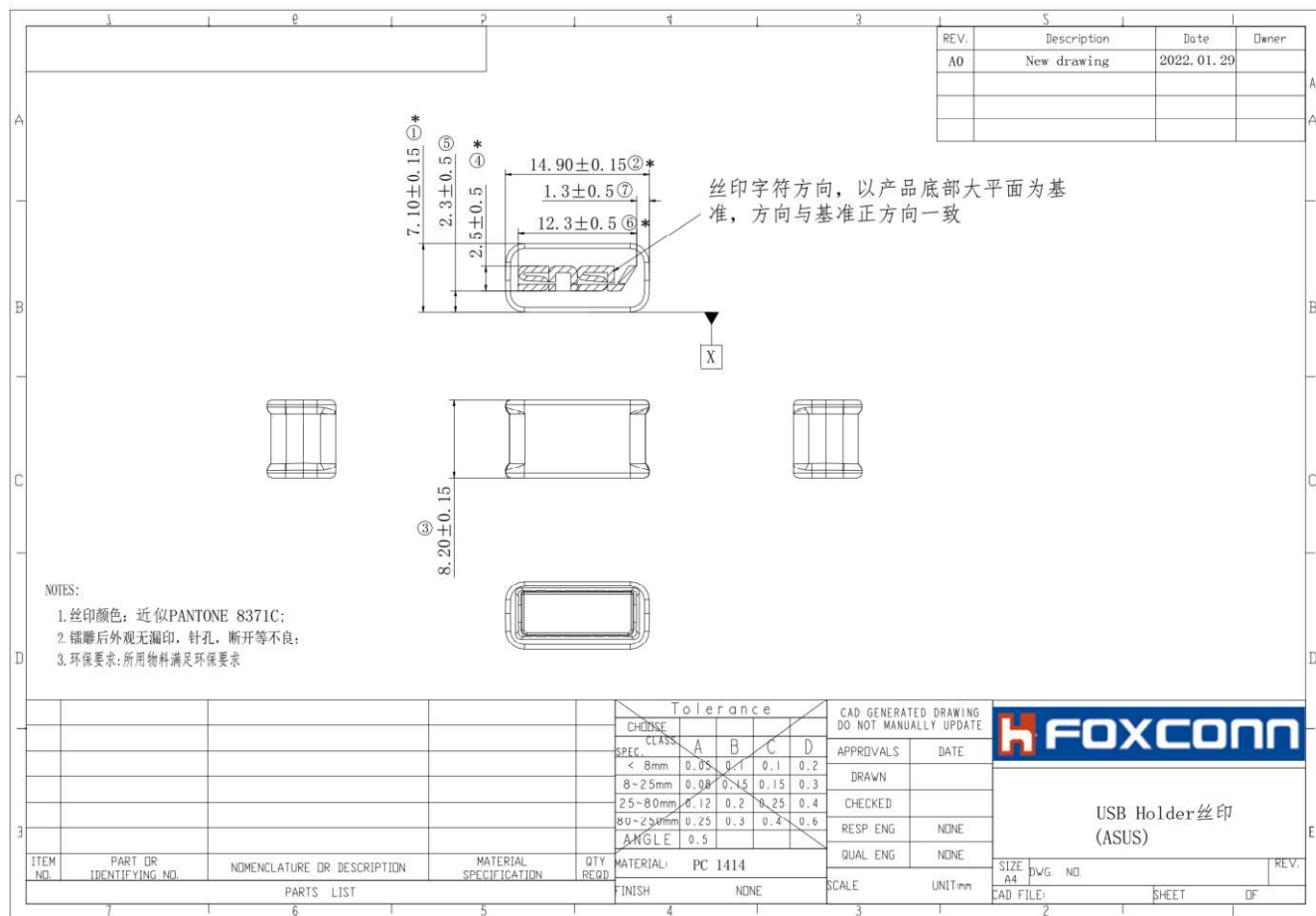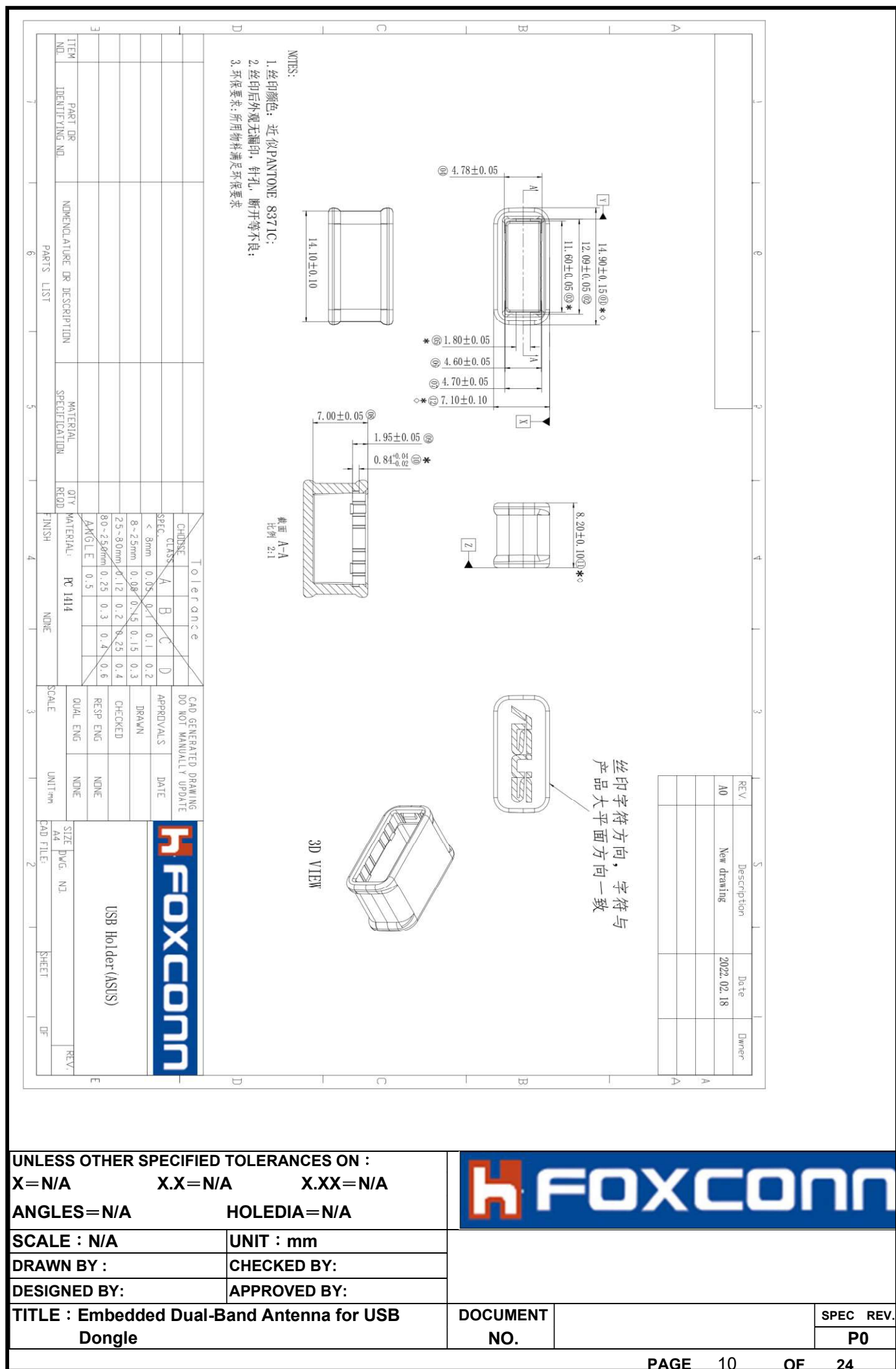ANGLES＝N/A   HOLEDIA＝N/A
SCALE：N/A   UNIT：mm
DRAWN BY :   CHECKED BY:
DESIGNED BY: APPROVED BY:
TITLE：Embedded Dual-Band Antenna for USB Dongle

DOCUMENT NO.

SPEC REV.
P0

FAI

序号 No.	标称值 Std. Dim	正公差 Usl Tol	负公差 Lsl Tol	上限 Upper	下限 Lower	实测值 Measurement value												最大值 MAX.	最小值 MIN.	平均值 Mean	% Tolerance		Alert/Reject		判定 Judge	量具 Gauge
						1-1	1-2	1-3	2-1	2-2	2-3	3-1	3-2	3-3	4-1	4-2	4-3				Upper	Lower	High	Low		
1	14.9	0.15	-0.15	15.05	14.75	14.9	14.892	14.904	14.886	14.883	14.889	14.884	14.9	14.898	14.895	14.893	14.897	14.904	14.884	14.894	3%	11%			OK	0MM
2	12.09	0.05	-0.05	12.14	12.04	12.095	12.093	12.093	12.09	12.09	12.093	12.092	12.093	12.091	12.084	12.086	12.086	12.095	12.084	12.091	10%	12%			OK	0MM
3	11.6	0.05	-0.05	11.65	11.55	11.57	11.571	11.569	11.575	11.572	11.579	11.574	11.576	11.575	11.567	11.568	11.564	11.579	11.564	11.572	0%	72%			OK	0MM
4	4.78	0.05	-0.05	4.83	4.73	4.747	4.748	4.746	4.747	4.742	4.747	4.754	4.746	4.755	4.744	4.743	4.751	4.755	4.742	4.748	0%	76%			OK	0MM
5.1	1.8	0.05	-0.05	1.85	1.75	1.772	1.774	1.768	1.777	1.778	1.77	1.776	1.776	1.769	1.766	1.769	1.772	1.778	1.766	1.772	0%	68%			OK	0MM
5.2	1.8	0.05	-0.05	1.85	1.75	1.764	1.768	1.769	1.768	1.77	1.764	1.77	1.777	1.776	1.778	1.771	1.775	1.778	1.764	1.771	0%	72%		Alert	OK	0MM
6	4.6	0.05	-0.05	4.65	4.55	4.564	4.564	4.564	4.568	4.565	4.564	4.561	4.562	4.56	4.563	4.558	4.558	4.568	4.558	4.563	0%	84%			OK	0MM
7	4.7	0.05	-0.05	4.75	4.65	4.671	4.67	4.676	4.669	4.672	4.67	4.673	4.67	4.672	4.671	4.672	4.674	4.676	4.669	4.672	0%	62%			OK	0MM
12	7.1	0.1	-0.1	7.2	7	7.136	7.132	7.129	7.114	7.122	7.125	7.117	7.124	7.125	7.117	7.113	7.116	7.136	7.113	7.123	36%	0%			OK	0MM
8	7	0.08	-0.08	7.08	6.92	6.991	6.997	6.991	6.991	6.992	6.991	6.998	6.996	6.993	6.993	6.992	6.993	6.998	6.991	6.993	0%	11%			OK	HG
11	8.2	0.1	-0.1	8.3	8.1	8.208	8.203	8.202	8.211	8.216	8.213	8.213	8.214	8.209	8.21	8.207	8.212	8.216	8.202	8.210	16%	0%			OK	HG
9.1	1.95	0.05	-0.05	2	1.9	1.945	1.938	1.94	1.948	1.945	1.948	1.947	1.941	1.955	1.935	1.942	1.953	1.955	1.935	1.945	10%	30%			OK	0MM
10.1	0.84	0.04	-0.02	0.88	0.82	0.848	0.855	0.852	0.856	0.854	0.85	0.855	0.852	0.854	0.856	0.852	0.858	0.858	0.848	0.854	45%	0%			OK	0MM
9.2	1.95	0.05	-0.05	2	1.9	1.943	1.936	1.946	1.935	1.942	1.947	1.94	1.943	1.941	1.93	1.943	1.951	1.951	1.93	1.941	2%	40%			OK	0MM
10.2	0.84	0.04	-0.02	0.88	0.82	0.854	0.851	0.858	0.858	0.852	0.854	0.848	0.847	0.844	0.856	0.858	0.859	0.859	0.844	0.853	48%	0%			OK	0MM

UNLESS OTHER SPECIFIED TOLERANCES ON：
X＝N/A   X.X＝N/A   X.XX＝N/A
ANGLES＝N/A   HOLEDIA＝N/A
SCALE：N/A   UNIT：mm
DRAWN BY :   CHECKED BY:
DESIGNED BY: APPROVED BY:
TITLE：Embedded Dual-Band Antenna for USB Dongle
DOCUMENT NO.
SPEC REV. P0