

SPECIFICATION FOR APPROVAL

Customer: Telink

Product description: 2.4G rubber duck Antenna

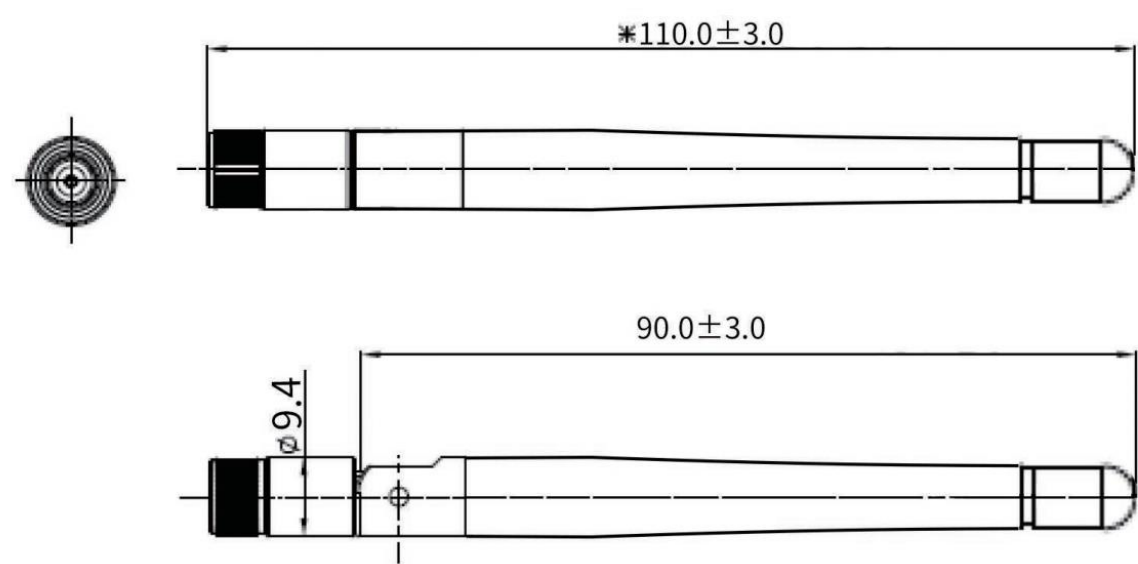
Uni Link’s part number: KXWX-2.4G-Z

Issue Date: 2019/11/07

Note: 2400-2500MHz,SMA male

Product parameters

Model	KXWX-433E-4
Main Technical Specifications	
Frequency Range（MHz）	2400-2500
Bandwidth（MHz）	100
VSWR	≤1.5
Gain（dBi）	1.4
Max Input power（W）	50
Input Impedance（Ω）	50
Polarization Type	Vertical
Antenna Size（mm）	110+/-3
Connector Type	SMA MALE



1.Electrical Characteristic

	ITEM	TEST CONDITION	SPECIFICATION
1	VSWR	Using PROTEK A333 networking analyzer to measure Antenna S1 VSWR characteristics	PIC 1
2	Smith Chart	Using PROTEK A333 networking analyzer to measure Antenna S1 Smith Chart characteristics	PIC 2
3	Gain Response	Using PROTEK A333 networking analyzer to measure Antenna S1 Gain Response characteristics	

2. MECHANICAL CHARACTERISTICS

1	BENDING TEST	Put load 120g at the end of the wire, fixed joints, swaying test at an angle of 60 degrees , test features after 1000 times	No sign of damage
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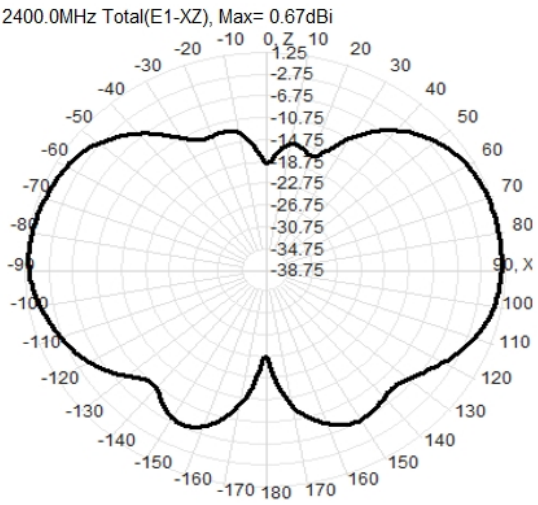
2	STRENG TEST	15 pounds of static load applied to the bottom of the actinomyces end for one minute.	No sign of damage
3	PULLING FORCE	Pull test with a tension meter between connector and wire	No sign of damage
4	VIBRATION TEST	the X-axis direction for 120 minutes, and the Y-axis direction 120 minutes, the Z-axis direction 240 minutes as vibration testing of 1.1mm amplitude and 33.30Hz/sec of frequency	No sign of damage

3. DURABILIT

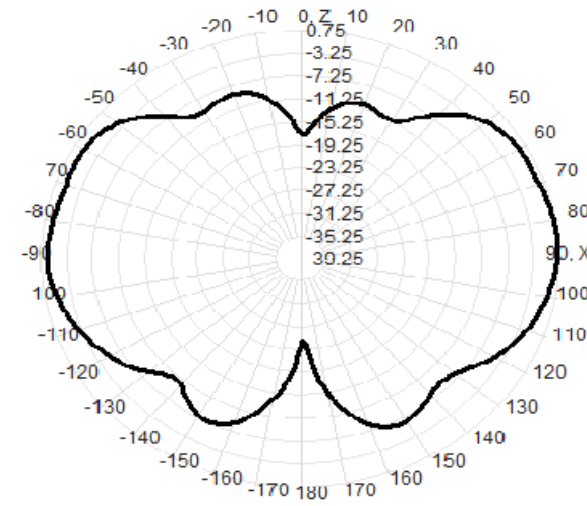
1	SAIT SPRAY TEST		All characteristic range is 30% of the initial value
2	HEAT TEST	50 +/- 2 °C for 96 hours, after keep in normal condition for 30mim the to test.	
3	HUMIDITY TEST	40+2°C 90-95%RH for 96hours, after keep in normal condition for 30mim the to test.	
4	COLD TEST	-40+2°C for 96hours, after keep in normal condition for 30mim the to test.	

PIC 1

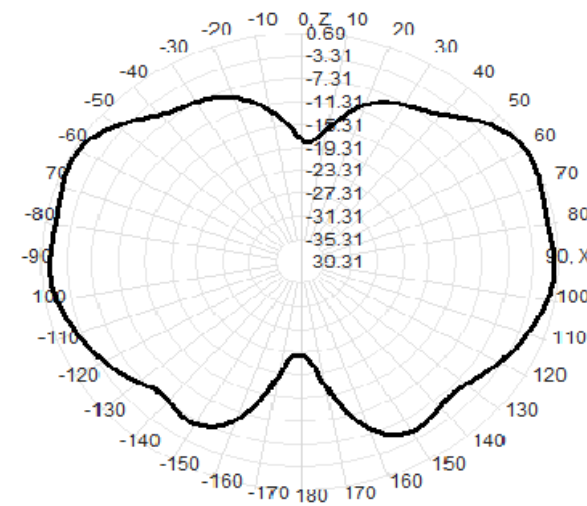
2400.0MHz Total(E1-XZ),
Max= 0.67dBi



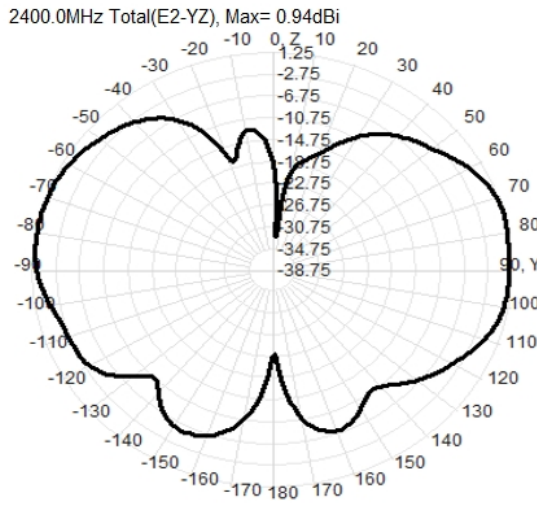
2440.0MHz
Total(E1-XZ
) , Max=
0.34dBi



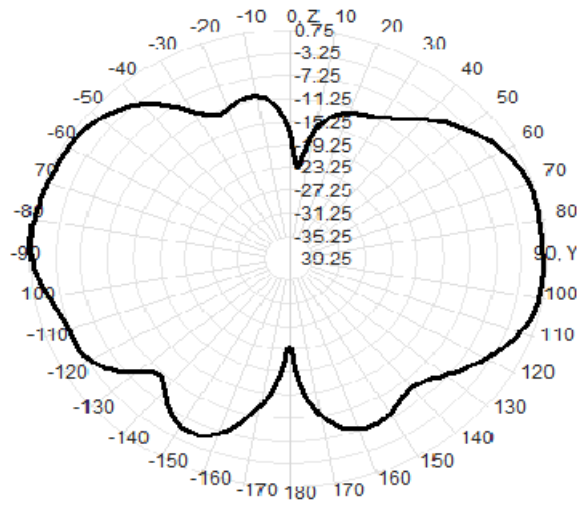
2480.0MHz
Total(E1-XZ
) , Max=
0.46dBi



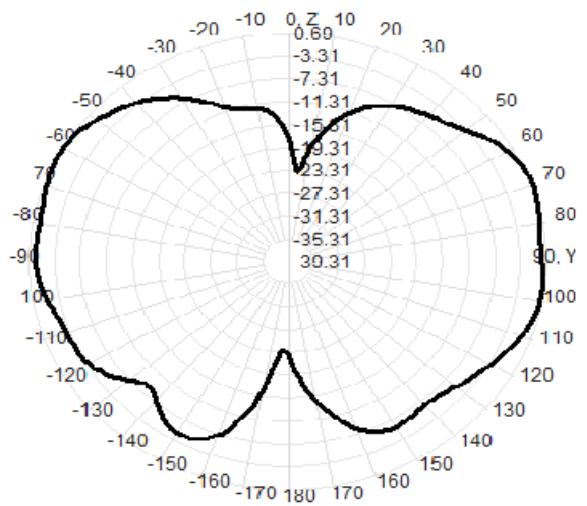
2400.0MHz Total(E2-YZ),
Max= 0.94dBi



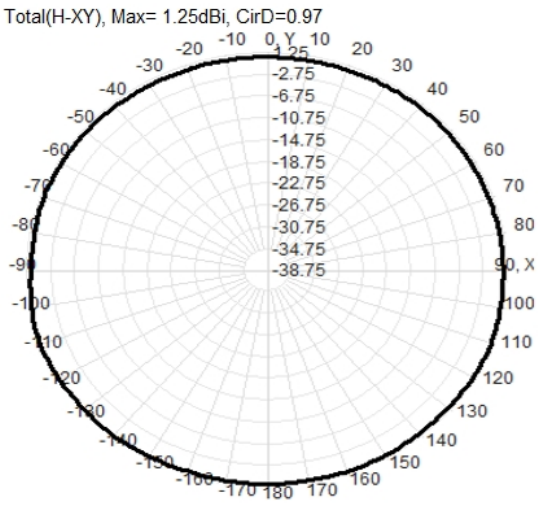
2440.0MHz
Total(E2-YZ
) , Max=
0.75dBi



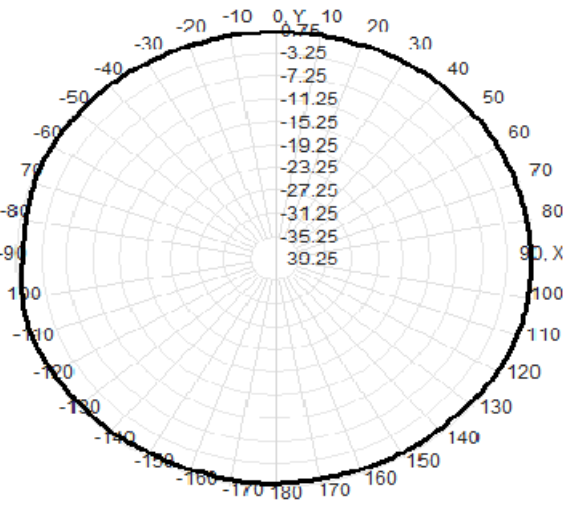
2480.0MHz
Total(E2-YZ
) , Max=
0.69dBi



Total(H-XY), Max=
1.25dBi, CirD=0.97



Total(H-XY
) , Max=
0.58dBi,
CirD=0.91



Total(H-XY
) , Max=
0.21dBi,
CirD=1.01

