



ISO9001 ISO14001 IATF16949 CHILISIN ELECTRONICS CORP.

RoHS & Halogen Free & REACH Compliance.

# SPECIFICATION FOR APPROVAL

Customer :

\_\_\_\_\_

Customer P/N :

\_\_\_\_\_

Drawing No :

\_\_\_\_\_

Quantity :

Pcs.

Date :

2020/08/11

\_\_\_\_\_

Chilisin P/N :

BTPA00460725GC1A03

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## SPECIFICATION

ACCEPTED BY:

<b>COMPONENT ENGINEER</b>	
<b>ELECTRICAL ENGINEER</b>	
<b>MECHANICAL ENGINEER</b>	
<b>APPROVED</b>	
<b>REJECTED</b>	

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Drawn by

Checked by

Approved by





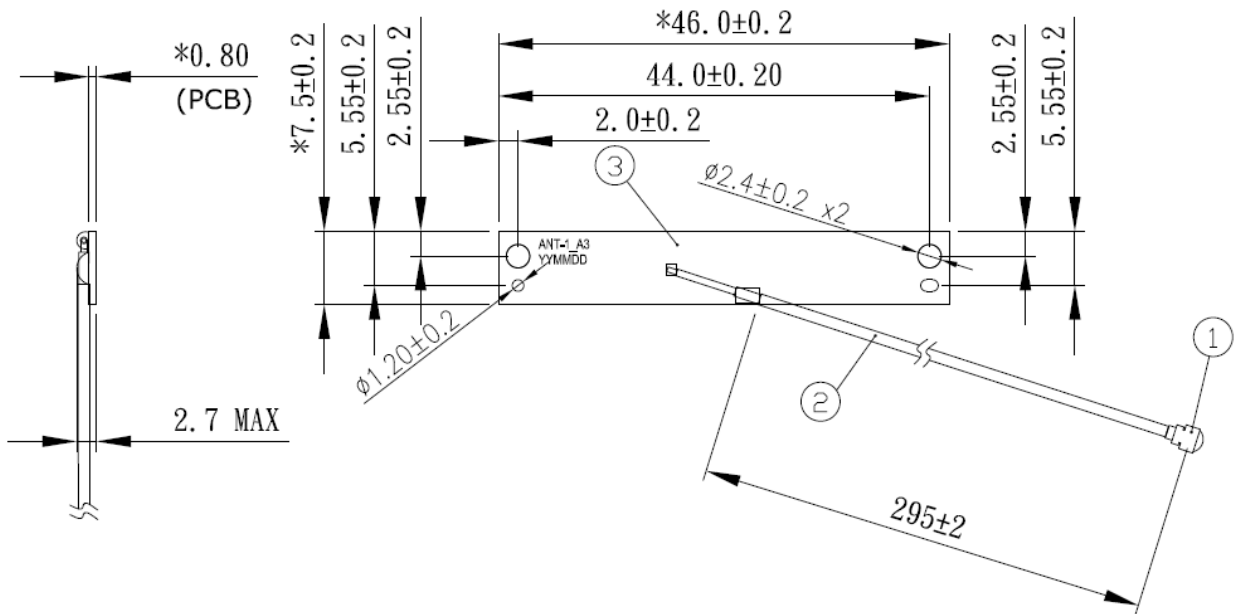
ISO9001 ISO14001 IATF16949 CHILISIN ELECTRONICS CORP.

# Contents

Item	Description	Page
1. . . . .	Mechanical Specification	. . . . . 4
2. . . . .	RF Specification	. . . . . 5
3. . . . .	TEST REPORT	. . . . . 6~9

# Mechanical Specification

RoHS COMPLIANT



備註:

- 1.電氣特性必須100%測試以及標註 \* 的尺寸須做重點檢驗(SPC)
- 2.此產品及其附屬包裝材料的均質成份須滿足無鹵管制要求:  
Br<900ppm,Cl<900ppm ,Br+Cl<1500ppm

LTR	DESCRIPTION	DATE	REQ. BY
△	MODIFY_PATTERN	08/11/20	ALLEN
△	MODIFY_CABLE_LENGTH	07/22/20	ALLEN
△	NEW_DRAWING	04/30/20	ALLEN

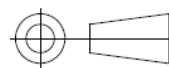
NO	DESCRIPTION	QTY	REMARK
6		1	
5		1	
4		1	
3	PCB	FR4 46mm x 7.5mm x 0.8mm	1
2	Cable	1.13MM COAXIAL CABLE (白色)	1
1	Connector	I-PEX一代端子	1

設計 DR. ALLEN 2020/08/11	核准 APPD. TASON 2020/08/11
版本說明	REVISION NOTE

容許公差	TOLERANCE
.XXX	±0.20
.XX	±0.35
.X	±0.50
X	±1.00
ANG	±5

品名 ASM, ANTENNA-1 BTPA00460725GC1A03
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**CHILISIN**



單位 UNIT mm	比例 SCALE 1:1	張數 SHEET 1/1	版本 REV. C
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ISO9001 ISO14001 IATF16949 CHILISIN ELECTRONICS CORP.

## RF Specification

Electrical		
<b>Item</b>	<b>Ant1</b>	
<b>Test Environment</b>	<b>Free Space</b>	
<b>Antenna Type</b>	<b>Dipole</b>	
<b>Frequency Range</b>	<b>2400~2500MHz 5150~5850MHz</b>	
<b>VSWR</b>	<b>&lt;2</b>	
<b>Polarization</b>	<b>Linear</b>	
<b>Gain(Peak Gain)</b>	<b>2G&lt;3.26 5G&lt;2.83</b>	
<b>Efficiency</b>	<b>2G≥60% 5G≥40%</b>	
<b>Input Impedance</b>	<b>50 ohm</b>	



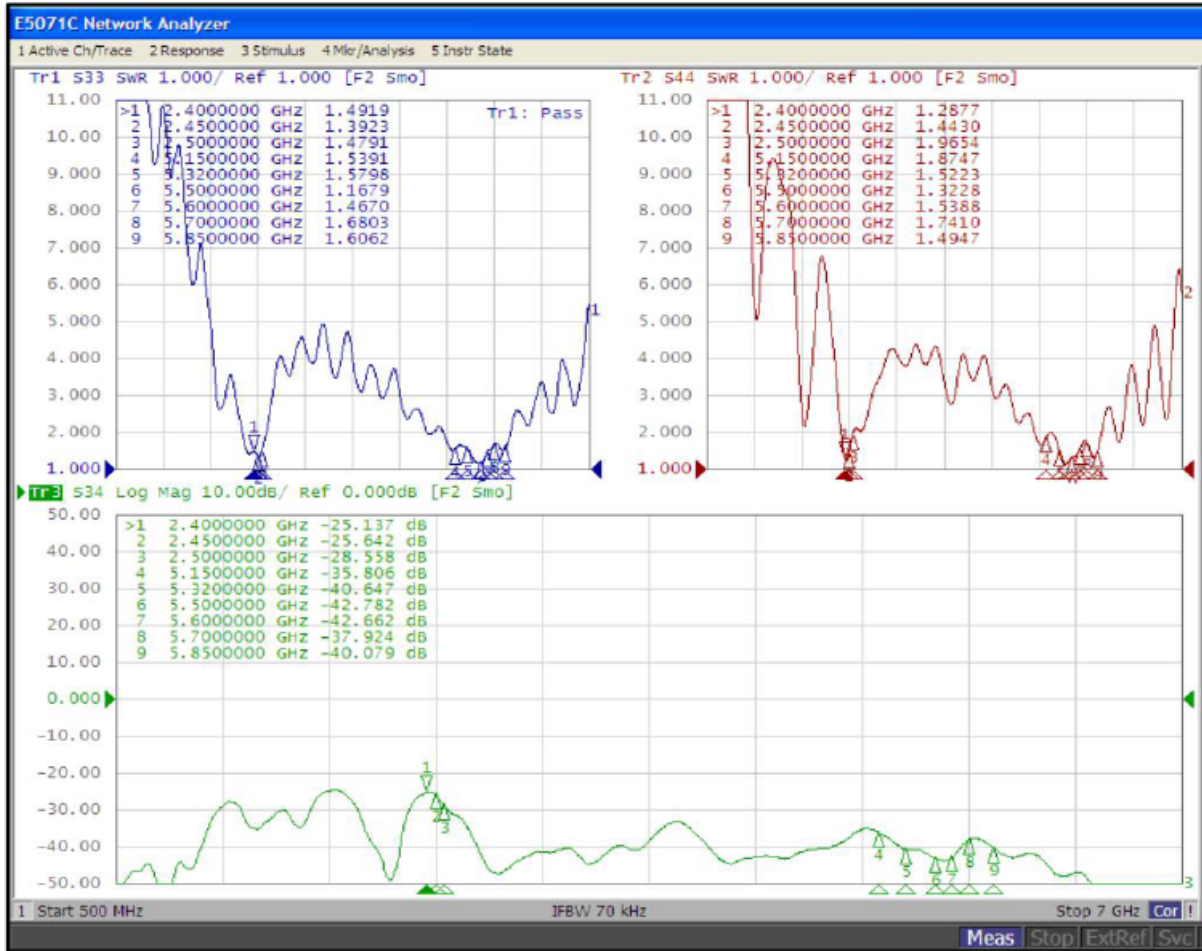
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# Test Report

## S- Parameter\_ Return Loss\_Ant1

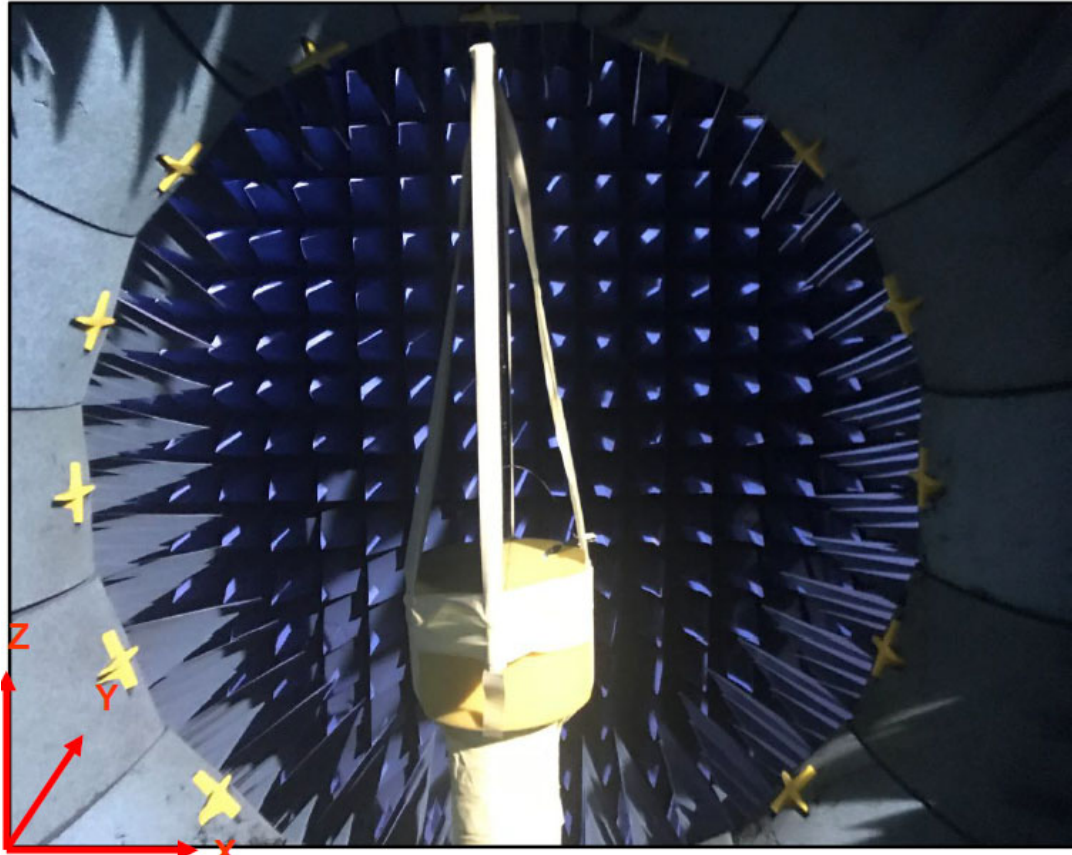
S33: Ant\_1

S44: Ant\_2



S34: Isolation

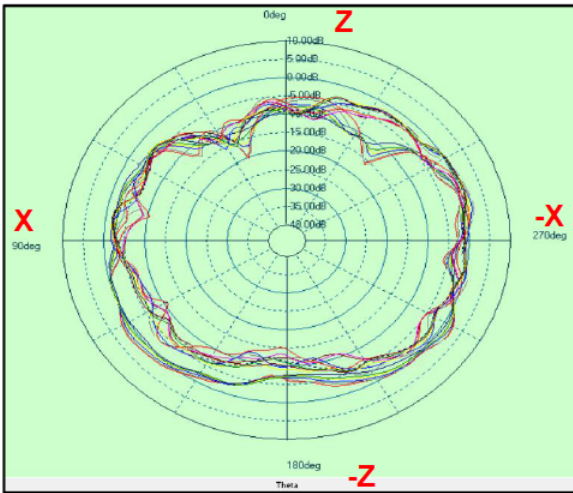
### 3D Peak Gain & Efficiency List Table



Ant1		
Frequency (MHz)	Efficiency (%)	Total Gain (dBi)
2400	62	3.26
2450	62	3.01
2500	60	3.02
5150	40	1.90
5320	42	1.90
5500	49	2.83
5600	50	2.82
5700	48	2.57
5850	45	2.32

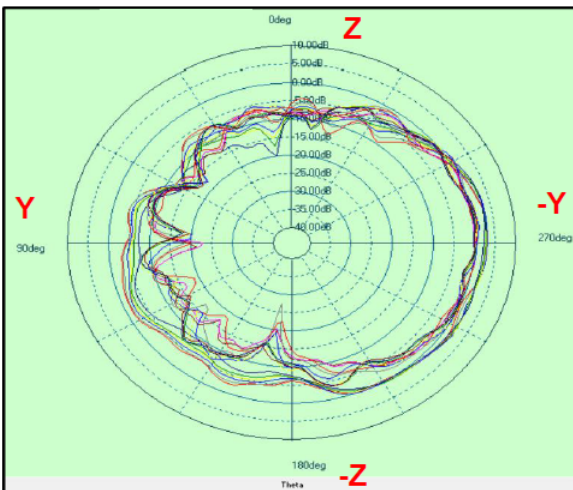


### 2D Gain Pattern\_Ant1\_ZX Cut(Phi=0)



Layer	Max value	Min value	Average
2400(MHz)	2.60 dB	-20.32 dB	-3.42 dB
2450(MHz)	1.65 dB	-16.17 dB	-3.70 dB
2500(MHz)	0.61 dB	-12.99 dB	-3.86 dB
5150(MHz)	-0.04 dB	-12.56 dB	-5.84 dB
5320(MHz)	0.64 dB	-15.33 dB	-5.51 dB
5500(MHz)	2.09 dB	-13.96 dB	-4.34 dB
5700(MHz)	1.03 dB	-15.83 dB	-4.37 dB
5850(MHz)	0.96 dB	-14.78 dB	-4.64 dB

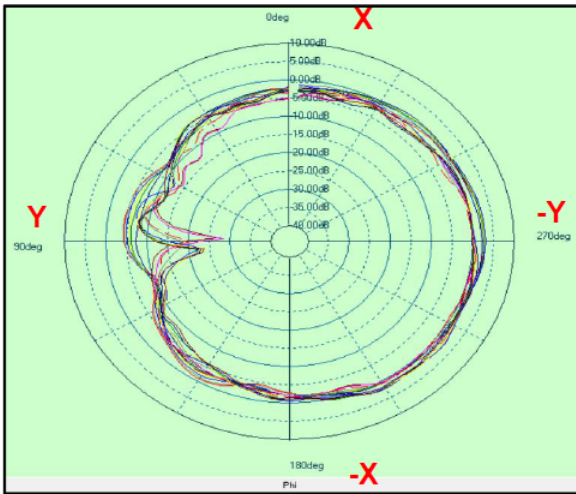
### 2D Gain Pattern\_Ant1\_ZY Cut(Phi=90)



Layer	Max value	Min value	Average
2400(MHz)	3.13 dB	-15.15 dB	-2.93 dB
2450(MHz)	2.99 dB	-14.98 dB	-3.31 dB
2500(MHz)	3.02 dB	-20.25 dB	-3.93 dB
5150(MHz)	0.51 dB	-21.38 dB	-6.38 dB
5320(MHz)	0.74 dB	-22.53 dB	-6.35 dB
5500(MHz)	1.12 dB	-27.55 dB	-5.59 dB
5700(MHz)	1.03 dB	-19.97 dB	-5.39 dB
5850(MHz)	0.80 dB	-19.68 dB	-5.88 dB



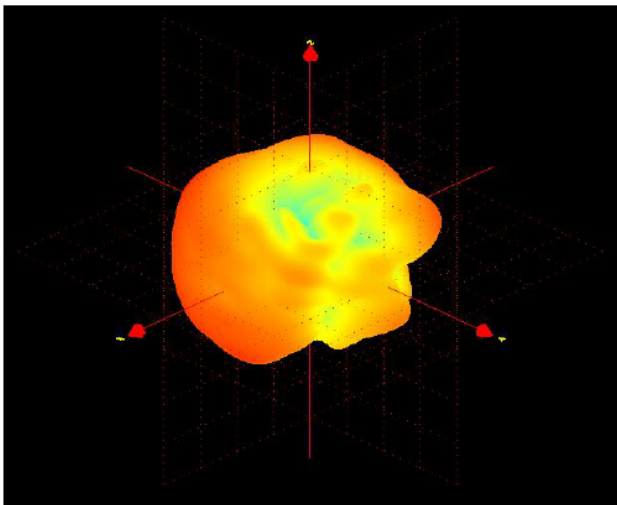
## 2D Gain Pattern\_Ant1\_XY Cut(Theta=0)



Layer	Max value	Min value	Average
2400(MHz)	2.80 dB	-10.92 dB	-2.13 dB
2450(MHz)	2.83 dB	-9.82 dB	-1.88 dB
2500(MHz)	2.23 dB	-10.31 dB	-2.00 dB
5150(MHz)	1.22 dB	-27.05 dB	-3.72 dB
5320(MHz)	1.85 dB	-20.31 dB	-3.30 dB
5500(MHz)	2.44 dB	-18.74 dB	-2.81 dB
5700(MHz)	2.13 dB	-24.01 dB	-2.88 dB
5850(MHz)	1.96 dB	-23.90 dB	-3.02 dB

## 3D Gain Pattern\_Ant1

2450MHz



5500MHz

