



ISO9001 ISO14001 IATF16949 CHILISIN ELECTRONICS CORP.

RoHS & Halogen Free & REACH Compliance.

# SPECIFICATION FOR APPROVAL

Customer :

\_\_\_\_\_

Customer P/N :

\_\_\_\_\_

Drawing No :

\_\_\_\_\_

Quantity :

Pcs.

Date :

2020/11/10

\_\_\_\_\_

Chilisin P/N :

BTPA00460725GC1A06

\_\_\_\_\_

## 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





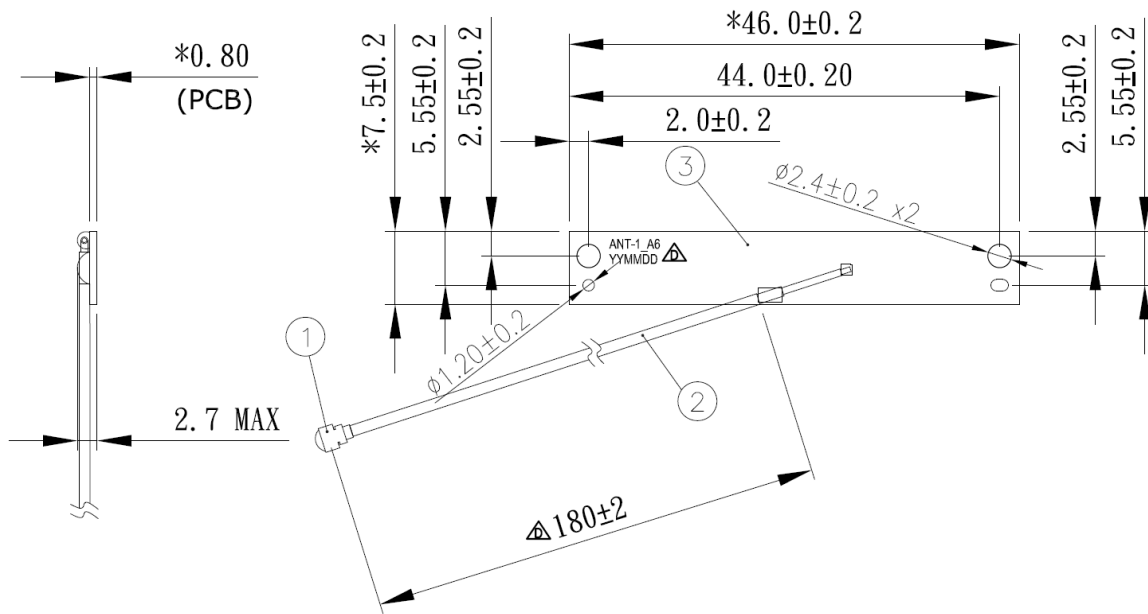
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# Mechanical Specification

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

△	MODIFY_DRAWING	11/10/20	ALLEN
△	MODIFY_CABLE_LENGTH_&_PATTERN	09/10/20	ALLEN
△	CABLE_LENGTH_MODIFY	05/26/20	ALLEN
△	NEW_DRAWING	04/30/20	ALLEN
LTR	DESCRIPTION	DATE	REQ. BY

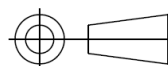
6			1	
5			1	
4			1	
3	PCB	FR4 46mm x 7.5mm x 0.8mm	1	
2	Cable	1.13MM COAXIAL CABLE (黑色)	1	
1	Connector	I-PEX一代端子	1	
NO	DESCRIPTION		QTY	REMARK

設計 DR. ALLEN 2020/11/10	核准 APPD. TASON 2020/11/10
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(右)  
BTPA00460725GC1A06

# CHILISIN



單位 UNIT	比例 SCALE	張數 SHEET	版本 REV.
mm	1:1	1/1	D



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## RF Specification

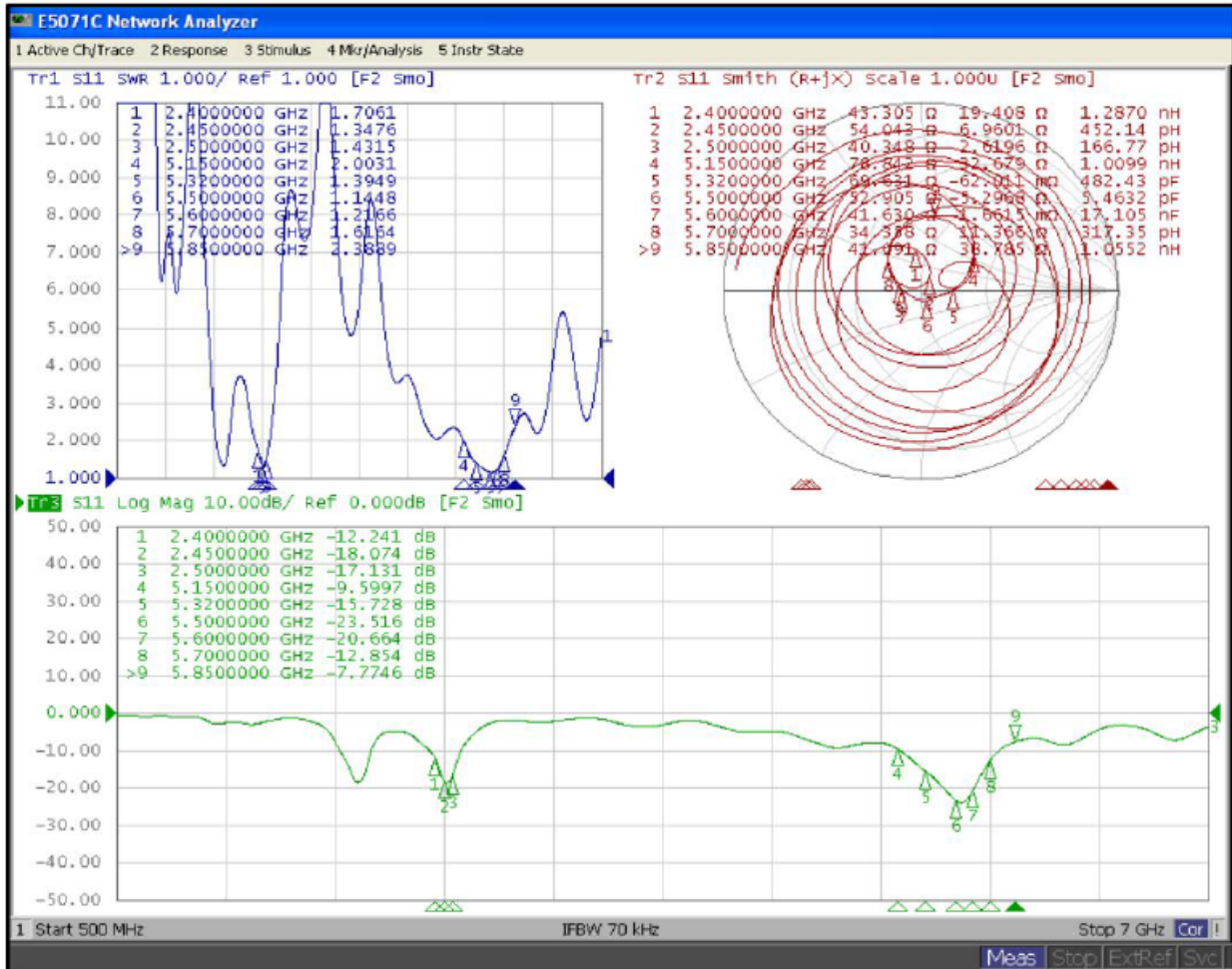
Electrical		
Item	Ant1	
Test Environment	Free Space	
Antenna Type	PF	
Frequency Range	2400~2500MHz 5150~5850MHz	
Returnloss	2400~2500MHz <-10 5150~5850MHz <-7.5	
Polarization	Linear	
Gain(Peak Gain)	<3.67	
Efficiency	≥45%	
Input Impedance	50 ohm	



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# Test Report

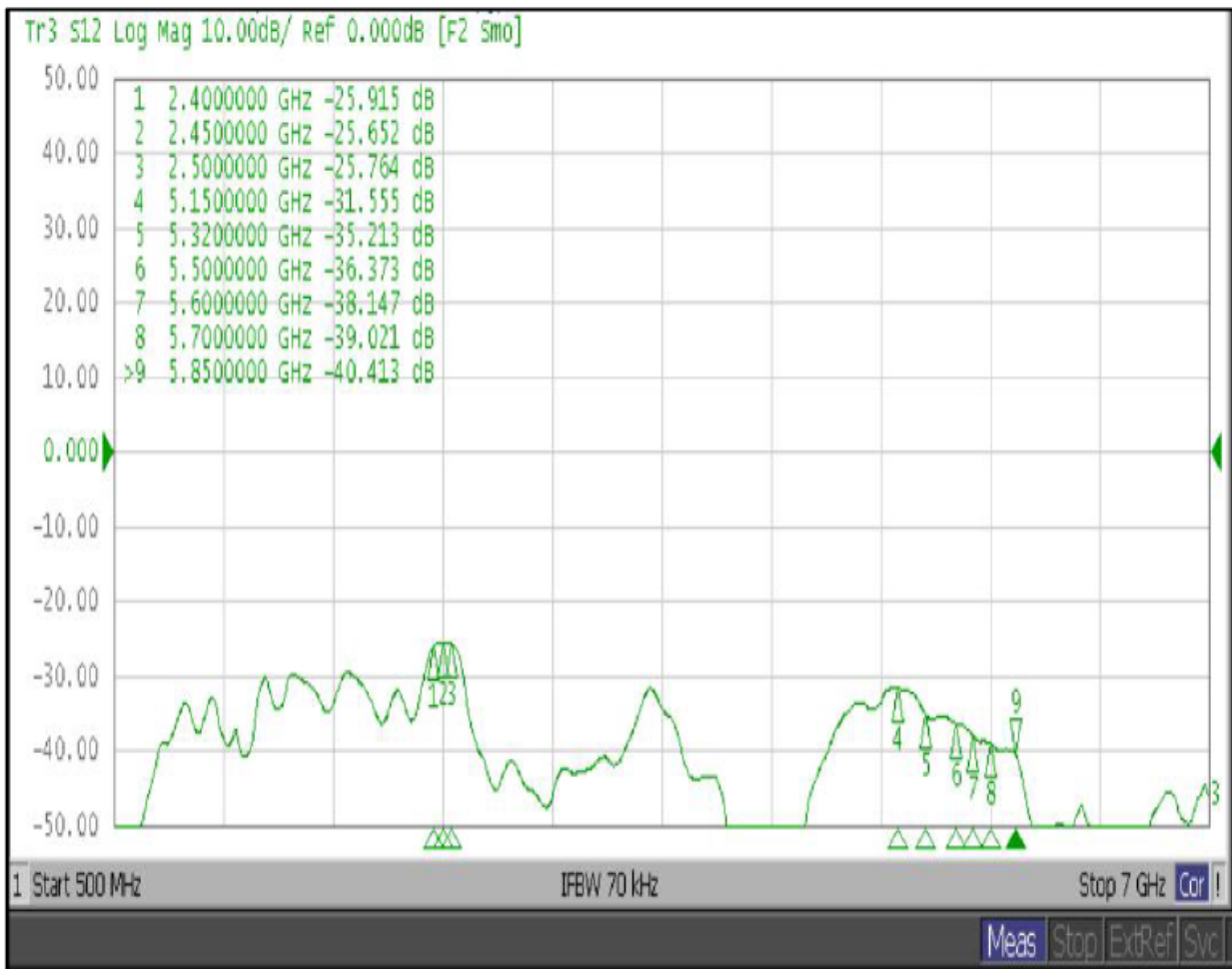
## S- Parameter\_ Return Loss\_Ant1





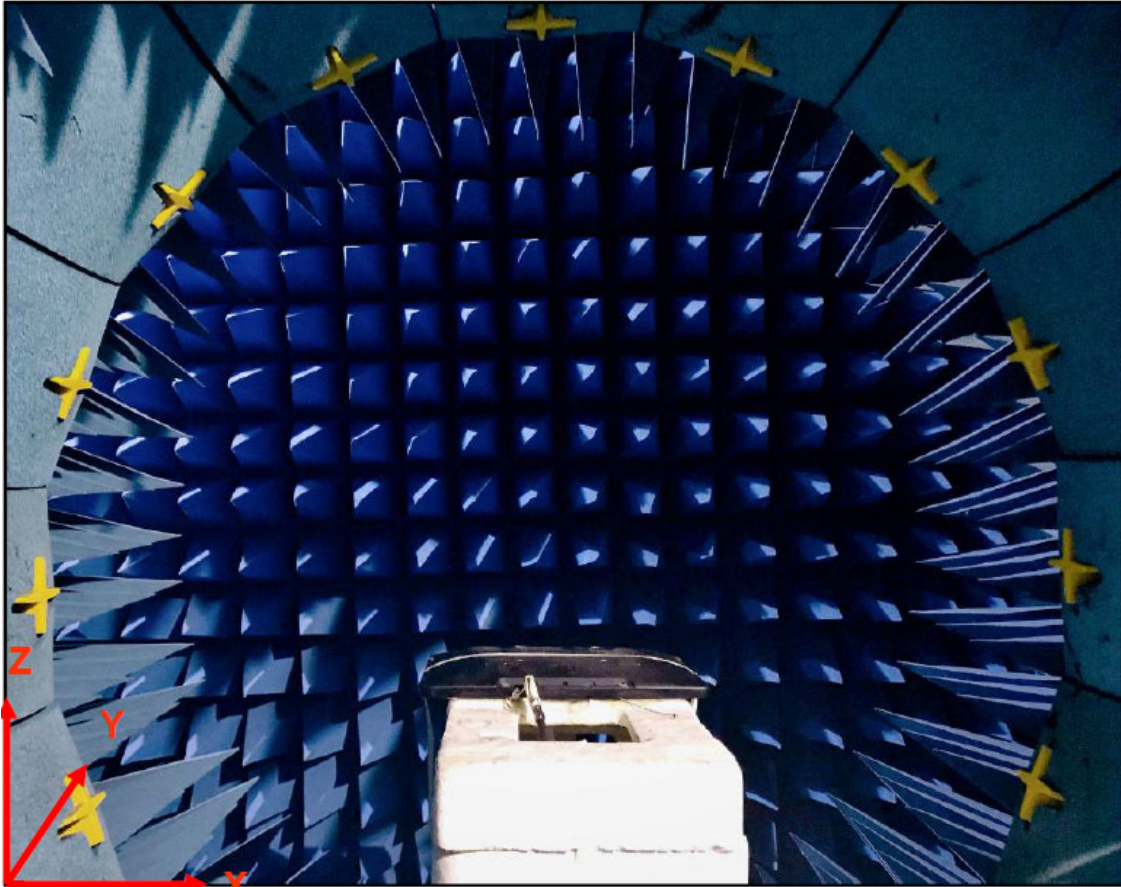
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## S- Parameter Isolation





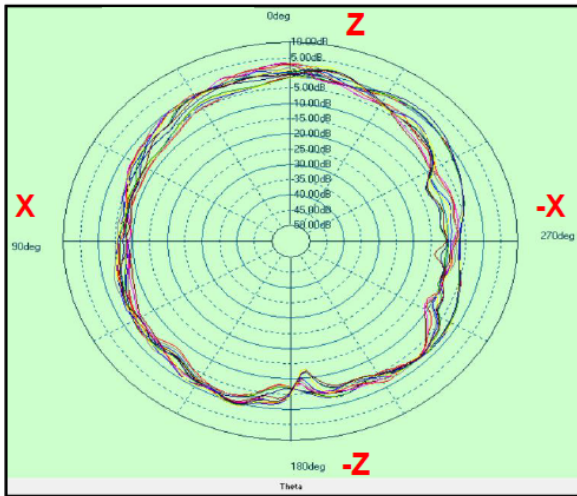
### 3D Peak Gain & Efficiency List Table



Ant1		
Frequency (MHz)	Efficiency	Total Gain(dBi)
2400	45	1.37
2412	45	1.56
2437	47	2.00
2450	47	2.09
2462	48	2.11
2500	50	2.50
5150	49	2.73
5180	50	2.96
5320	54	3.32
5500	61	3.67
5600	57	3.42
5700	58	2.86
5785	52	3.02
5805	50	3.24
5850	49	3.22

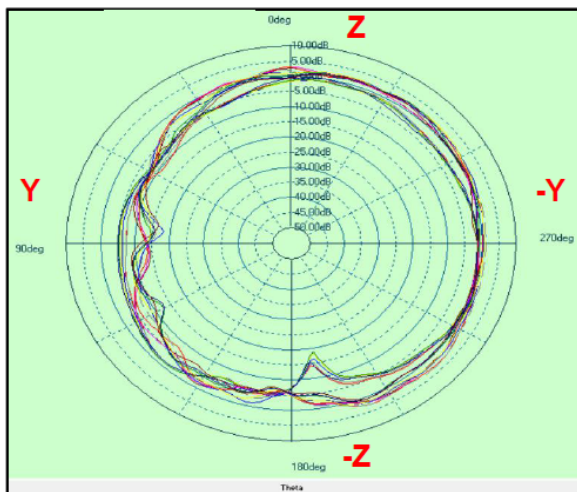


## 2D Gain Pattern\_Ant1\_ZX Cut(Phi=0)



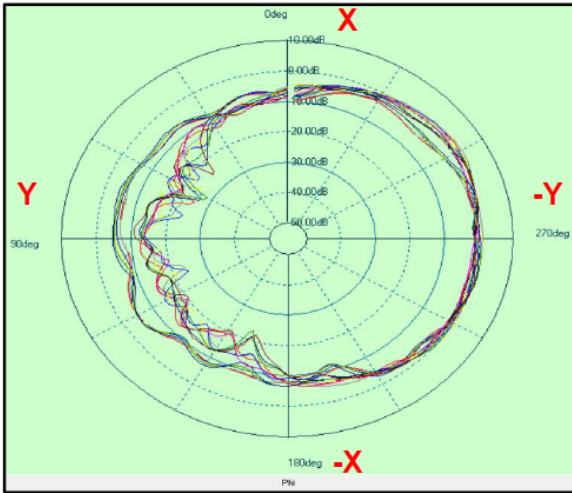
Layer	Max value	Min value	Average
2400(MHz)	0.28 dB	-9.69 dB	-4.27 dB
2450(MHz)	0.76 dB	-8.54 dB	-3.77 dB
2500(MHz)	1.77 dB	-9.02 dB	-3.26 dB
5150(MHz)	2.68 dB	-11.03 dB	-4.12 dB
5320(MHz)	2.69 dB	-11.77 dB	-3.43 dB
5500(MHz)	2.34 dB	-10.37 dB	-3.16 dB
5785(MHz)	1.86 dB	-12.62 dB	-4.13 dB
5850(MHz)	1.35 dB	-13.95 dB	-4.56 dB

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



Layer	Max value	Min value	Average
2400(MHz)	-0.25 dB	-14.69 dB	-3.84 dB
2450(MHz)	-0.85 dB	-18.17 dB	-3.93 dB
2500(MHz)	-0.36 dB	-15.71 dB	-3.64 dB
5150(MHz)	2.39 dB	-14.45 dB	-1.83 dB
5320(MHz)	2.83 dB	-13.64 dB	-1.30 dB
5500(MHz)	3.15 dB	-15.77 dB	-1.15 dB
5785(MHz)	2.34 dB	-14.80 dB	-2.38 dB
5850(MHz)	1.96 dB	-16.49 dB	-2.91 dB

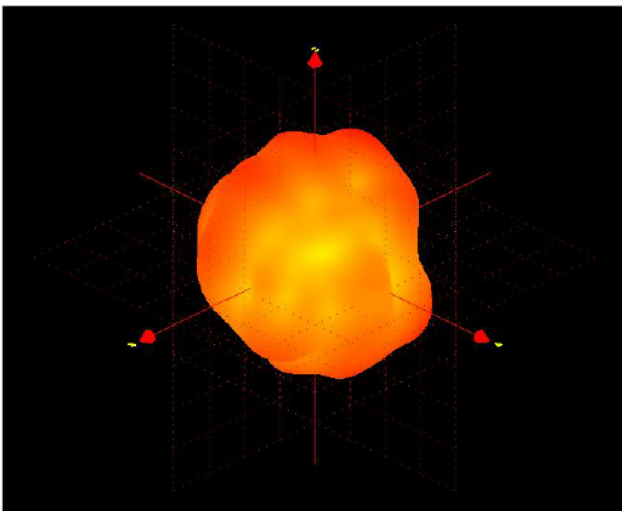
## 2D Gain Pattern\_Ant1\_XY Cut(Theta=0)



Layer	Max value	Min value	Average
2400(MHz)	0.24 dB	-10.43 dB	-5.31 dB
2450(MHz)	0.18 dB	-12.03 dB	-4.94 dB
2500(MHz)	0.74 dB	-12.79 dB	-4.68 dB
5150(MHz)	0.81 dB	-21.17 dB	-6.18 dB
5320(MHz)	2.29 dB	-25.83 dB	-5.68 dB
5500(MHz)	2.79 dB	-24.10 dB	-5.14 dB
5785(MHz)	1.88 dB	-28.48 dB	-5.83 dB
5850(MHz)	1.52 dB	-25.28 dB	-6.17 dB

## 3D Gain Pattern\_Ant1

2450MHz



5500MHz

