



WHA YU INDUSTRIAL CO., LTD.(HEAD OFFICE)

DONGGUAN AEON TECH CO.,LTD.(CHINA)

SPECIFICATION FOR APPROVAL

CUSTOMER: 優必關

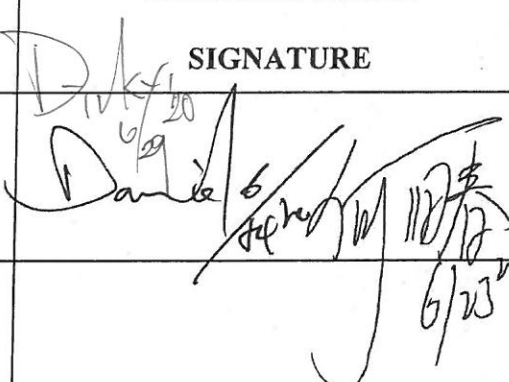
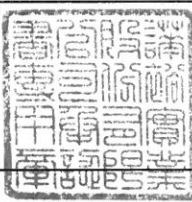
PART NAME: RF Antenna Assembly

PART NO.:

REVISION:

W. Y. P/NO.: C1991-510073-A(SRF2020776)

REV.: XI

	MANUFACTURER SIGNATURE	CUSTOMER SIGNATURE
APPROVED BY :		
DATE :	6/23	

WHA YU GROUP

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RF Antenna Assembly

Specification

1. Electrical Properties WITH HOUSING

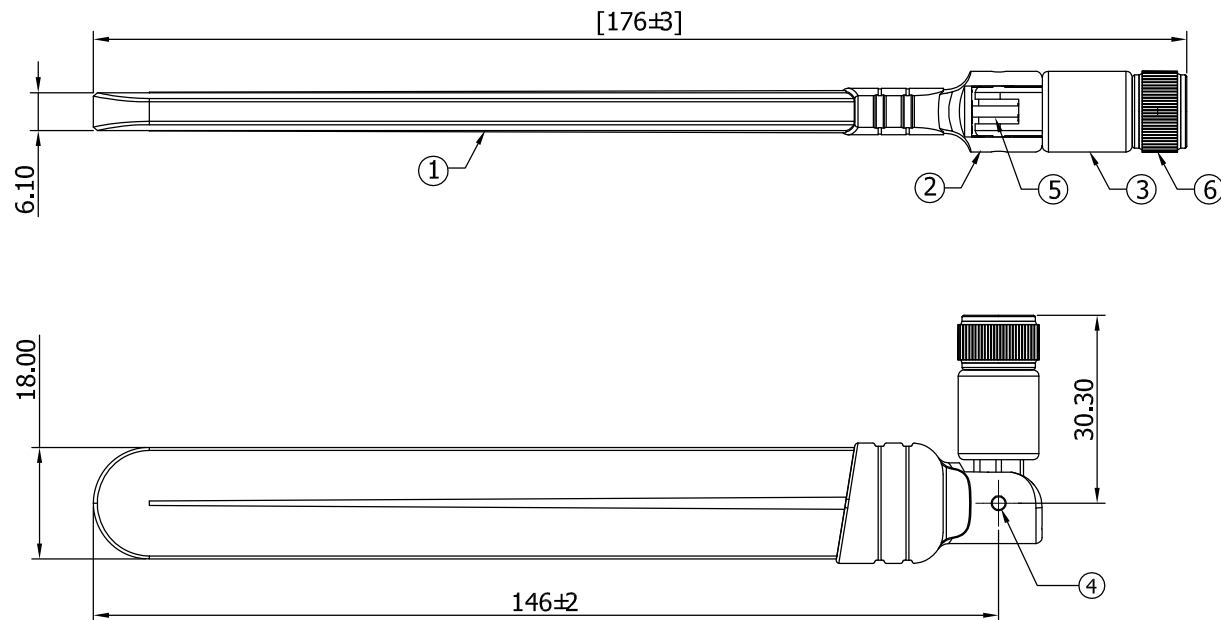
- 1.1 Frequency Range.....698~960;1710~2690 MHz
- 1.2 Impedance50Ω Nominal
- 1.3 VSWR<2.6
- 1.4 Return Loss.....>7 dB
- 1.5 RadiationOmni-directional
- 1.6 Gain.....< 2 dBi
- 1.7 Cable Loss..... 0.2dB Max.
- 1.8 Polarization.....Linear
- 1.9 Admitted Power..... 1W
- 1.10 Cable..... 1.37 Coaxial Cable

2. Physical Properties :

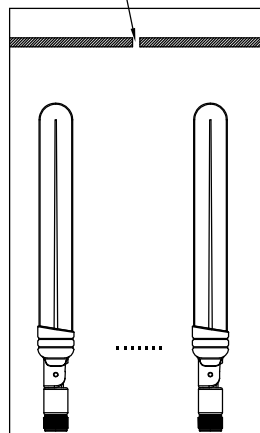
- 3.1 Operating Temp. -10°C ~ +60°C
- 3.2 Storage Temp. -10°C ~ +70°C

CG-

REV	DATE	DESCRIPTION
X1	06/22-2020	New Issue



熱封留氣孔



Packing : 10 pcs/bag

6	Connector	SMA Straight Plug Standard	1	
5	Cable	1.37 Coaxial Cable	1	
4	Rivet	POM,Color: Black[黑色]	2	
3	Antenna Base	(CD-13)PC+PBT Color : Black[黑色]	1	
2	Antenna Base	(CD-761)PC ; Color : Black[黑色]	1	
1	Antenna Cap	(CD-702)ABS ; Color : Black[黑色]	1	
NO	DESCRIPTION			Q'TY
	REMARK			

CUSTOMER'S SINGATURE

XX.	±5.0
X.	±3.0
.X	±1.0
.XX	±0.5
.XXX	±0.1
⊕	⊖

APPROVED

CHECKED

DRAWING

CUSTOMER: 優必閣		
PART NO :		
PART NAME: RF Antenna Assembly		
W.Y P/NO : C1991-510073-A		
REV	UNIT	FILE : SRF2020776
X1	mm	SHEET : 1/1

M.gear Wha Yu Group

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LTE All Band Antenna Datasheet

*Document Number: **NE3-20xxx***

*Version: **V 1.1***

*Released Date: **2024/03/28***

*Prepared By: **Sky Lo***

*Reviewed By: **Sky Lo***



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- Test Setup for S-parameter Measurement
- Return Loss Results
- Test Setup for Radiation Pattern Measurement
- 2D Radiation Pattern Results
- Results Summary (return loss)

Revision History

Released Date	Version	Record
2020/06/23	1.00	Antenna Testing Report

Antenna Performance Summary

Antenna Only Gain & Efficiency – (Req. : Efficiency 30%)

Frequency	Peak Gain (dBi)	Efficiency	Frequency	Peak Gain (dBi)	Efficiency	Frequency	Peak Gain (dBi)	Efficiency
698MHz	-1.2	40%	875MHz	-1.0	32%	1980MHz	-0.4	41%
703MHz	-1.3	40%	880MHz	-1.3	30%	1990MHz	-0.5	41%
716MHz	-1.0	44%	890MHz	-0.6	32%	1995MHz	-0.9	38%
728MHz	-1.3	40%	915MHz	-0.6	34%	2010MHz	-0.7	39%
738MHz	-1.1	39%	925MHz	0.2	35%	2020MHz	-0.5	38%
746MHz	-0.8	41%	960MHz	-0.3	37%	2110MHz	-0.1	34%
758MHz	-1.1	39%	1710MHz	-0.5	43%	2170MHz	1.0	40%
768MHz	-1.3	35%	1750MHz	-0.7	47%	2180MHz	1.0	39%
777MHz	-0.9	38%	1770MHz	-0.8	46%	2200MHz	1.1	42%
798MHz	-1.1	38%	1780MHz	-0.6	45%	2300MHz	1.0	48%
803MHz	-1.2	37%	1785MHz	-1.2	43%	2350MHz	1.0	50%
814MHz	-0.8	37%	1805MHz	-0.8	47%	2400MHz	1.9	60%
824MHz	-0.2	33%	1850MHz	-0.4	43%	2450MHz	0.8	57%
830MHz	0.1	32%	1880MHz	-0.4	40%	2500MHz	1.3	57%
849MHz	-0.1	34%	1900MHz	-0.2	42%	2570MHz	-0.4	58%
859MHz	-0.7	34%	1910MHz	-0.1	39%	2620MHz	-0.8	53%
862MHz	-0.9	33%	1920MHz	0.2	42%	2690MHz	0.1	52%
869MHz	-0.5	35%	1930MHz	0.6	39%			

Specification

RF Function	Number of ANT	Frequency Band	Remark
LTE Ant.		698~960,1710~2690MHz	
Test Item	Specification		
Return Loss	> 7dB (Antenna only)		
Peak gain	< 2 dBi (Antenna only)		
Efficiency	>30~55% (Antenna only)		
Radiation pattern	Scale: +10 ~ -40dBi, Angle step size: 5 degree		

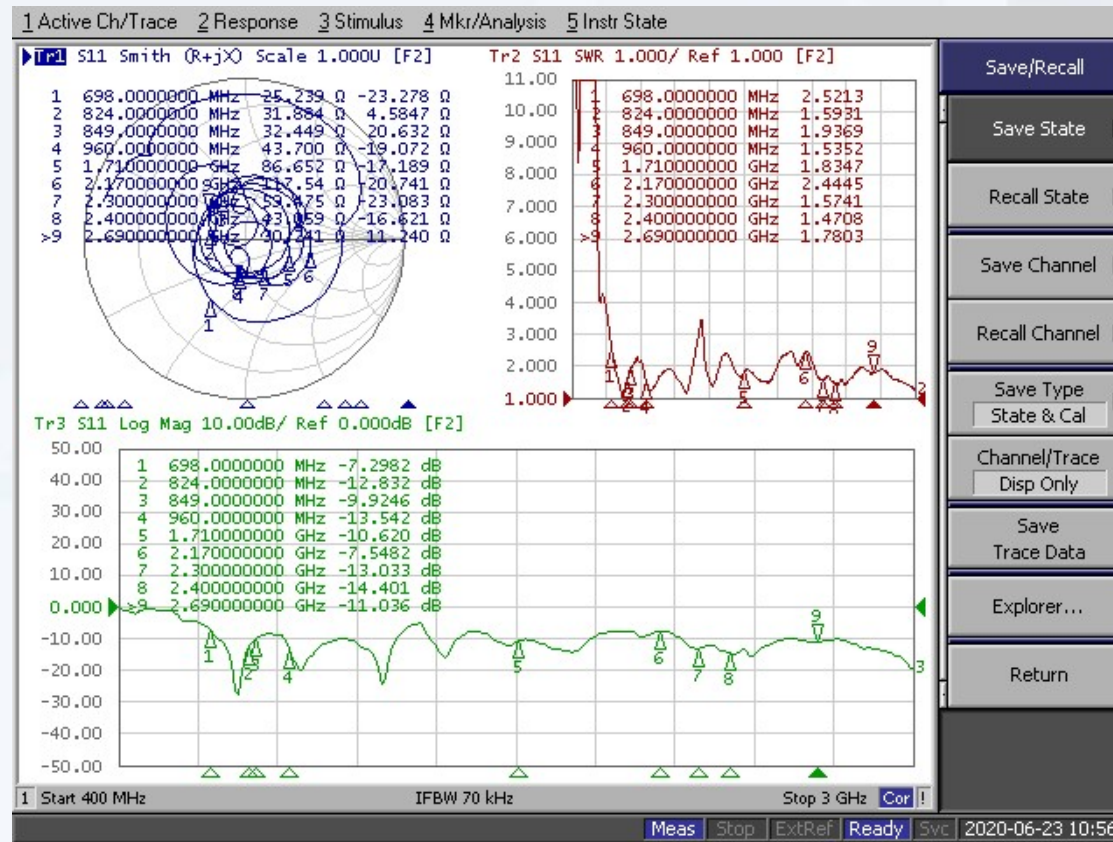
Antenna Placement & Solution



Antenna only

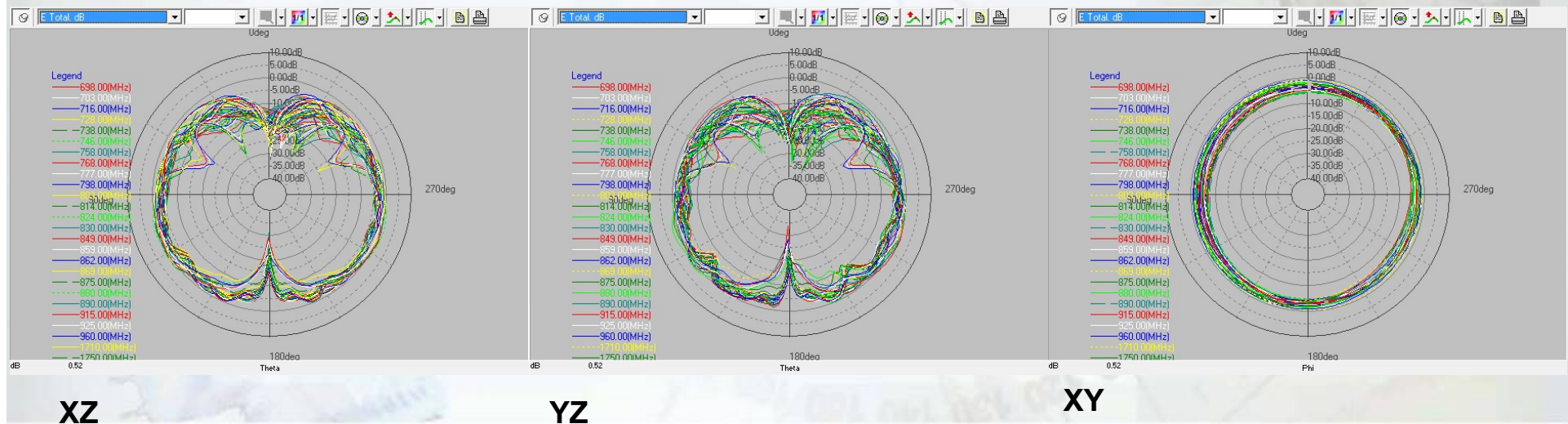
Antenna	ANT Type	Size (L * W * H)	Cable Length (mm)	Cable Type
LTE ANT	Dipole	176x18x6.1mm		

Return Loss Results

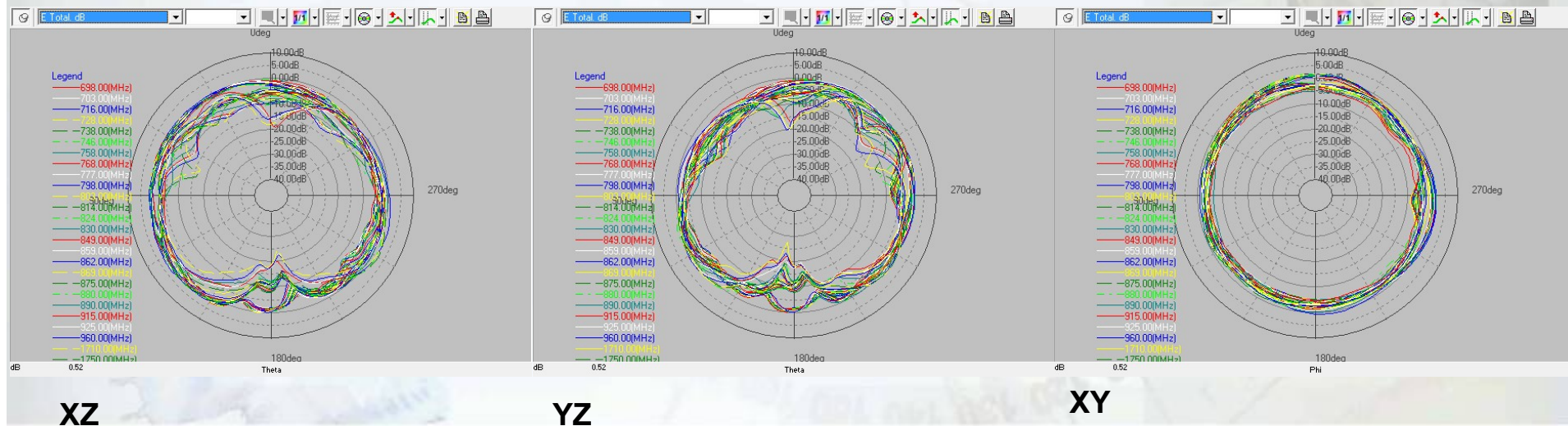


Antenna only

2D Radiation Pattern Results



2D Radiation Pattern Results



Conclusion

Antenna Performance Summary