

1. Antenna Specification

Antenna Specification

Electrical Specification

Item	Specification		Comment
Freq. Range	806MHz-960MHz	1710MHz-1880MHz	
Impedance	50 (Ω)		
Directional	Omni Directional		
Polarization	Vertical		
VSWR	≤ 3.0		
Peak Gain	-0.9dBi	2dBi	
Total Efficiency	30%	65%	
Test condition	passive test		
Power	10W		

Mechanical Specification

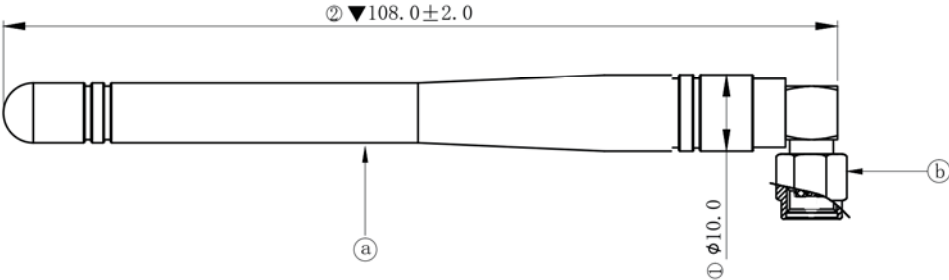
Antenna type	External antenna		
RF Cable Type	N/A		
Dimension	N/A		
Salt Spray	48(H)		

Environmental Specification

Operating temp	$-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$		
Storage temp	$-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$		

Antenna Picture

REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECNXXXXXX		11/04' 20			



b			Glod	1
a	Body	TPE	Black	1
ITEM	Description	Material	Finished	Q'ty



ELECTRIC
CONNECTOR
TECHNOLOGY

GENERAL TOLERANCE	
XX. ± 1.00	XX. $^{\circ} \pm 2^{\circ}$
X. ± 0.50	X. $^{\circ} \pm 1^{\circ}$
.X ± 0.30	.X $^{\circ} \pm 0.5^{\circ}$
.XX ± 0.20	

SCALE:	1:1
UNIT:	mm
SIZE:	A4



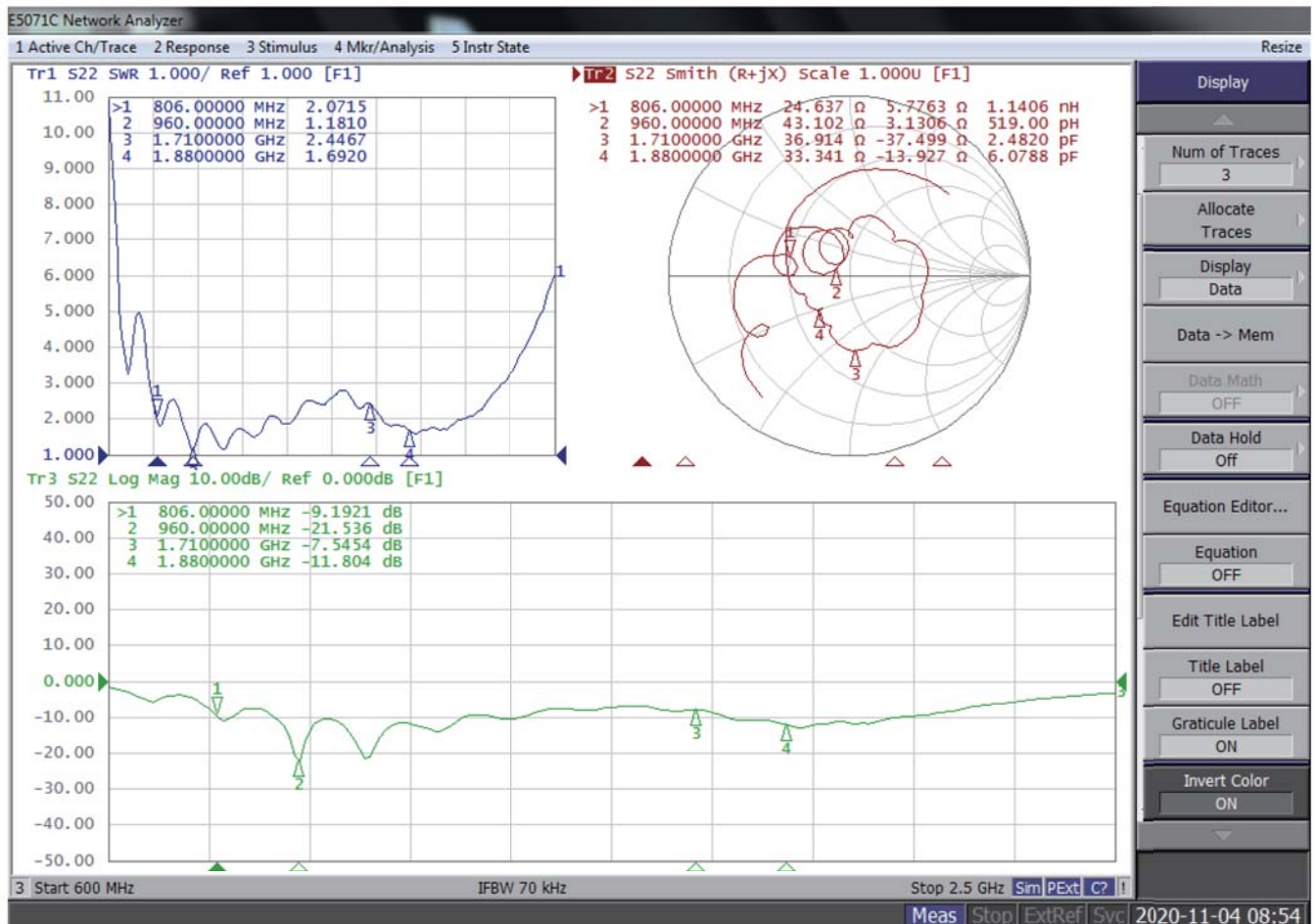
DRAWN:	DATE: 11/04' 20
CHECK:	DATE:
APPROVE:	DATE:

DWG. NO:	600-UXXX-01
PARTS NO. (INTENDED USE):	818011XXX

TITLE:	
REV.	X1
SHEET:	1/1

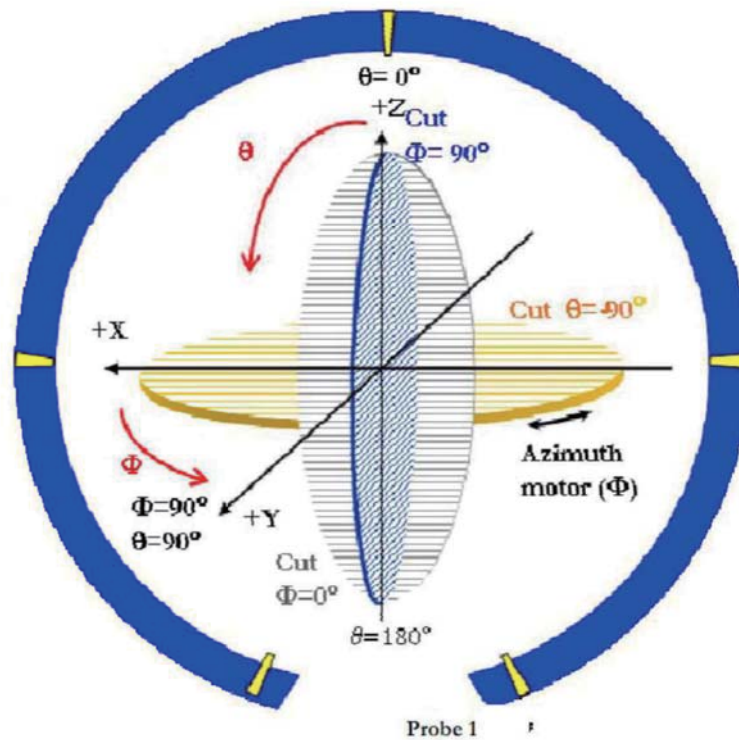
4. Antenna test result

4.1 Return loss/Smith chart/VSWR

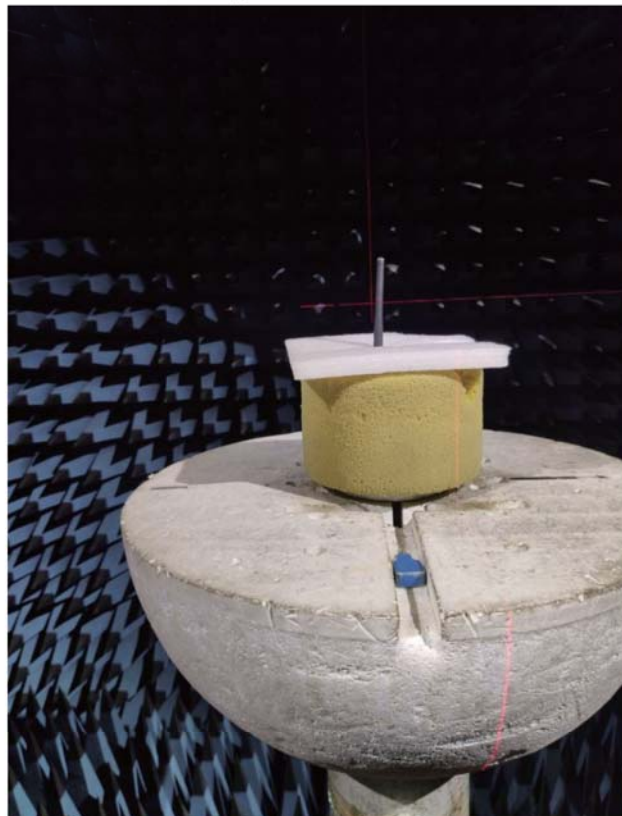


4.2 The gain and total efficiency test

4.2.1 The definition of coordinate system-Satimo SG24



The coordinate system of Chamber



The production test position

4.2.2 The test result of total efficiency and total gain

806MHz-960MHz

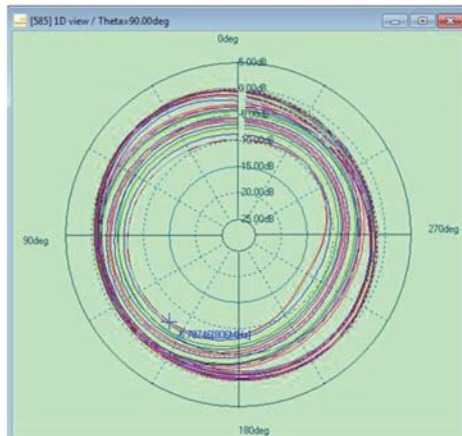
Frequency	Gain (dBi)	Efficiency(%)
806MHz	-3.71	15%
810MHz	-3.75	15%
820MHz	-2.92	17%
830MHz	-2.49	19%
840MHz	-1.98	22%
850MHz	-1.69	25%
860MHz	-1.27	27%
870MHz	-0.86	30%
880MHz	-0.66	31%
890MHz	-0.07	34%
900MHz	-0.19	35%
910MHz	0.15	39%
920MHz	0.43	43%
930MHz	0.63	45%
940MHz	0.94	48%
950MHz	0.76	47%
960MHz	0.93	51%
AVG	-0.93	32%

1710MHz-1880MHz

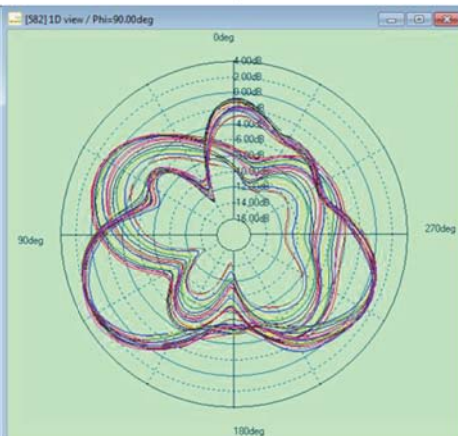
Frequency	Gain (dBi)	Efficiency(%)
1710MHz	2.08	63%
1720MHz	2.10	62%
1730MHz	2.34	64%
1740MHz	2.37	65%
1750MHz	2.35	66%
1760MHz	2.26	66%
1770MHz	2.31	66%
1780MHz	2.35	67%
1790MHz	2.37	66%
1800MHz	2.55	67%
1810MHz	2.46	65%
1820MHz	2.41	66%
1830MHz	2.47	68%
1840MHz	2.56	67%
1850MHz	2.88	70%
1860MHz	2.55	64%
1870MHz	2.51	66%
1880MHz	2.12	62%
AVG	2.39	66%

4.2.3 The antenna radiation pattern (2D/3D)

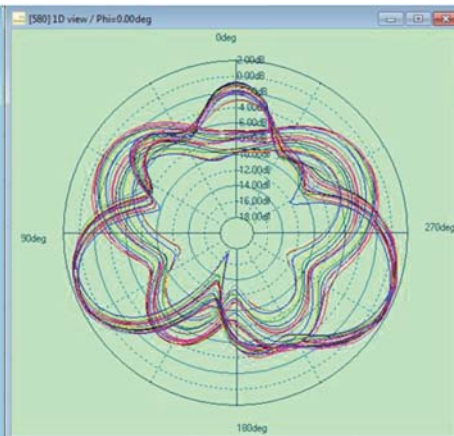
806MHz-960MHz/1710MHz-1880MHz



XOY

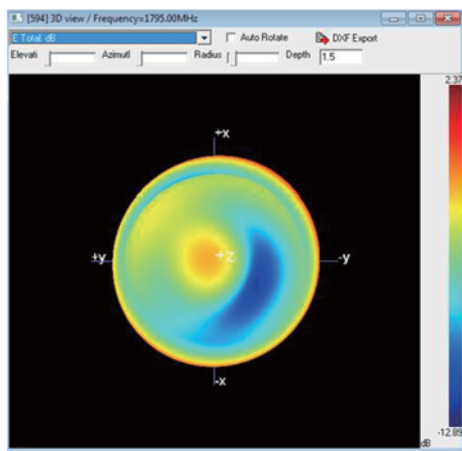
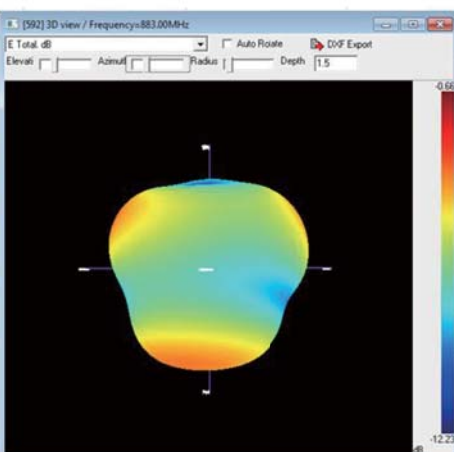
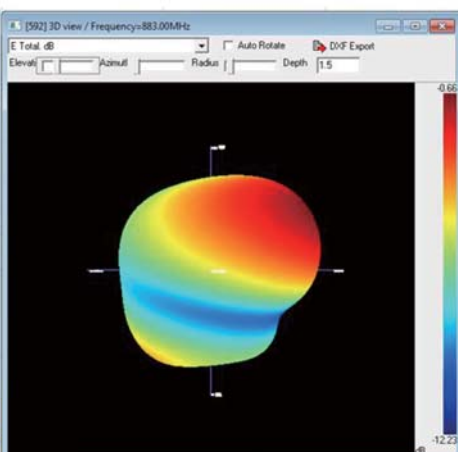
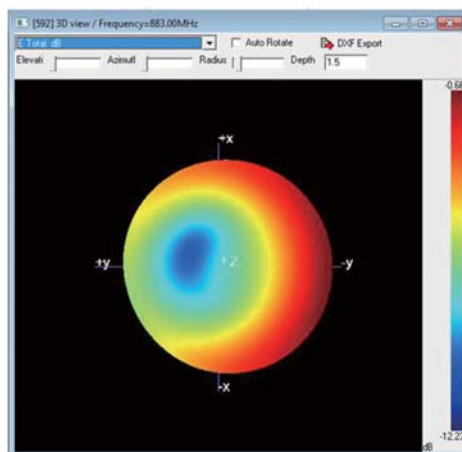


YOZ

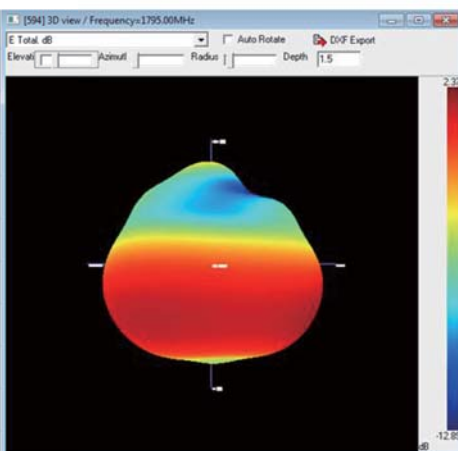


XOZ

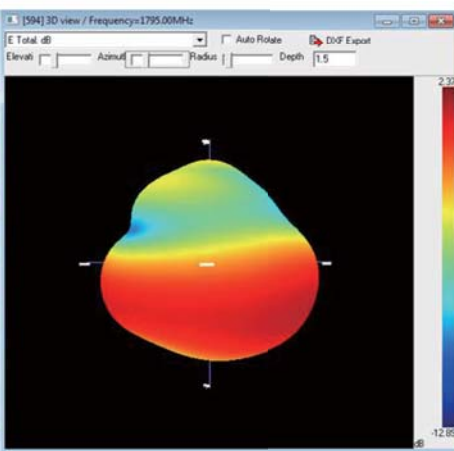
883MHz



XOY



YOZ



XOZ