

Specification for Approval

Customer:	Zillion
Part name:	ZT28S1-3 FPC
Part No. :	ZH100201
Customer Part No. :	

Customer Approved By		
APPROVAL	CHIEF	DESIGN

Supplier Confirmed		
	CHIEF	DESIGN
	Jack	Lee
	2024. 9. 5	2024. 9. 5
Technical Support		
If you have any questions about the following Specifications or RF product Keep Call Phone: 18350272787 E-Mail: li.jinkun@mhzrf.com		

Catalogue

NO	Content	Page
1	Cover	1
2	Catalog	2
3	Product chart/Assembly	3
4	Characteristics/Match	4
5	OTA darkroom	5
6	efficiency and gain	6
7	OTA report	7
8	Field pattern diagram	8-11
9	Drawing	12

Update of the Records			
Rev	Formulate	Date	Content
01	Lee	2024. 5. 5	new
02	Lee	2024. 9. 5	add data

Product picture

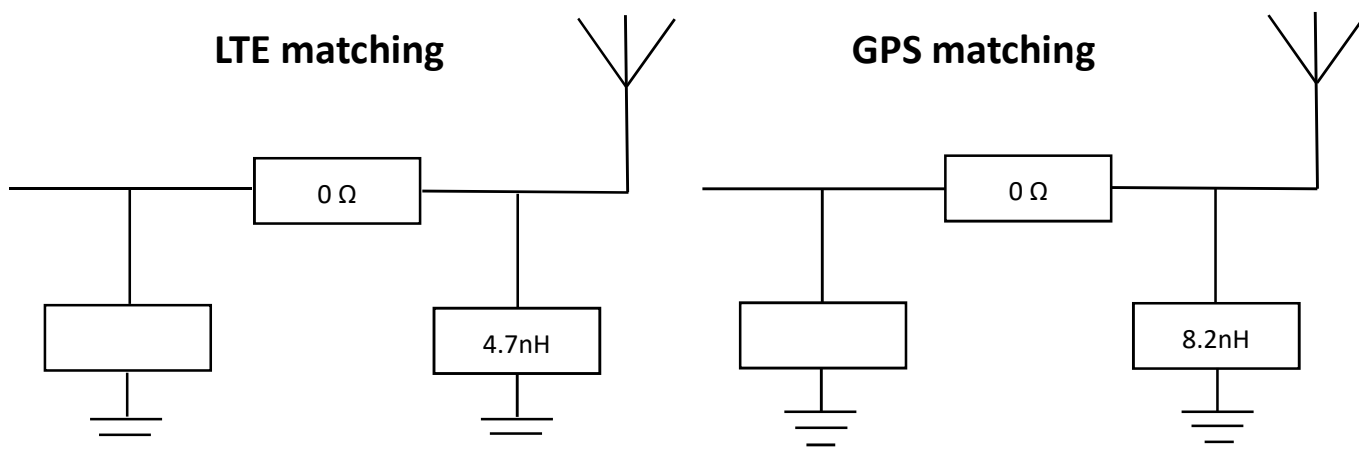


Assemble

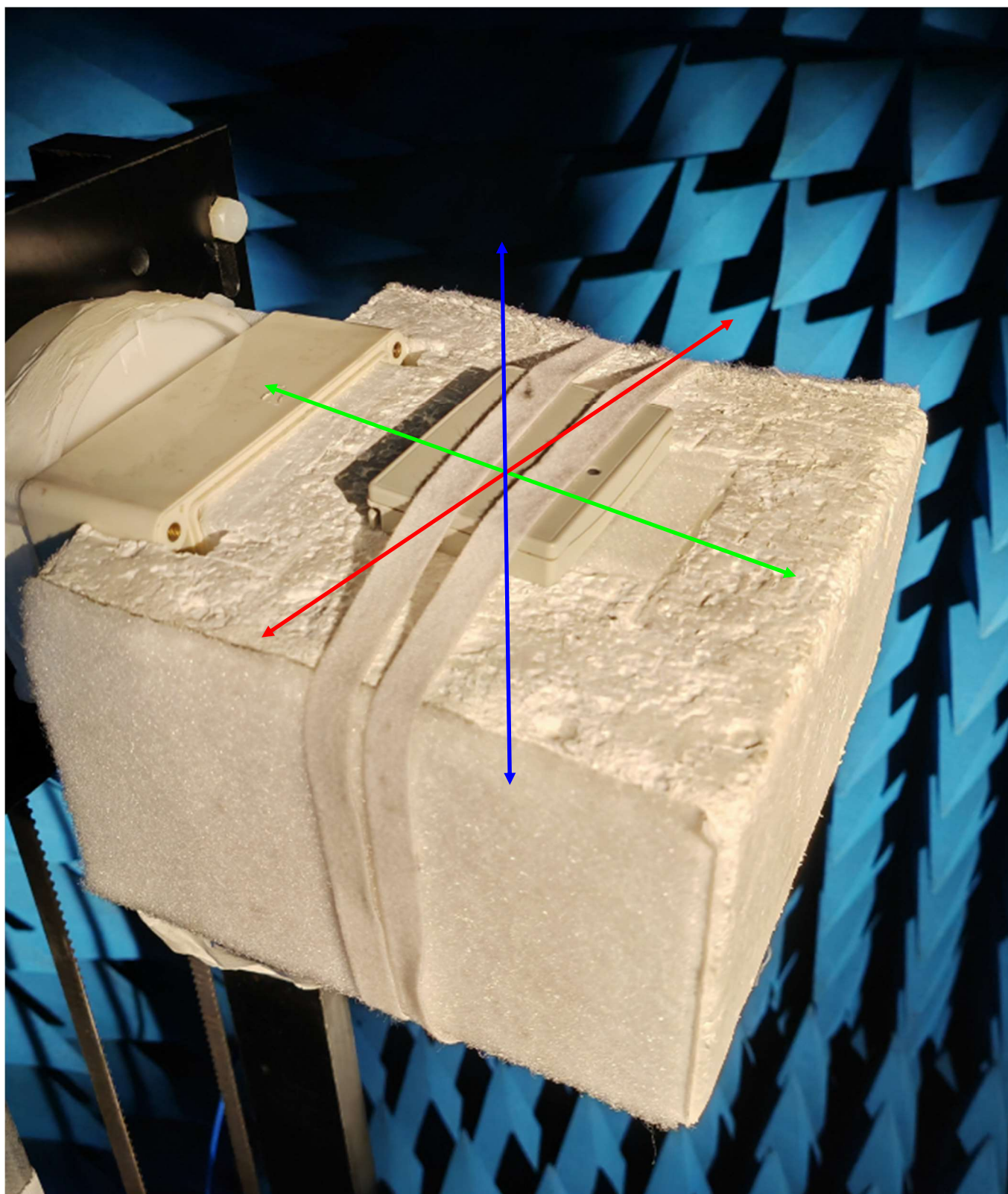


Antenna character

product type	FPC antenna
DESCRIPTION	VALUE
Frequency Range	700~965 1710~2690 MHz & 1575.42 MHz
V.S.W.R	air
Impedance	50 Ω
Gain	-7 - 2 dBi
Radiation	Omni-directional
Radiating element	1/4 Wave Helical
Polarization	Linear Vertical
Admitted power	2W
Connector	Contact
Operating temp	-40°C~+85°C



OTA picture



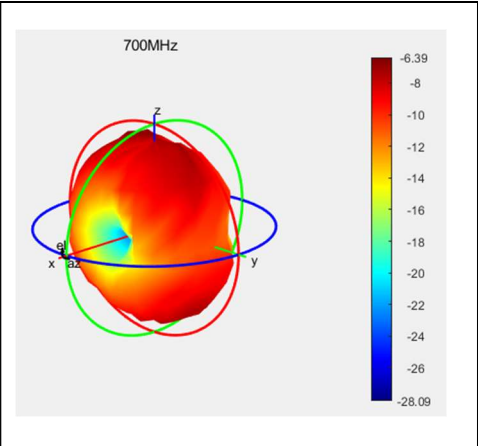
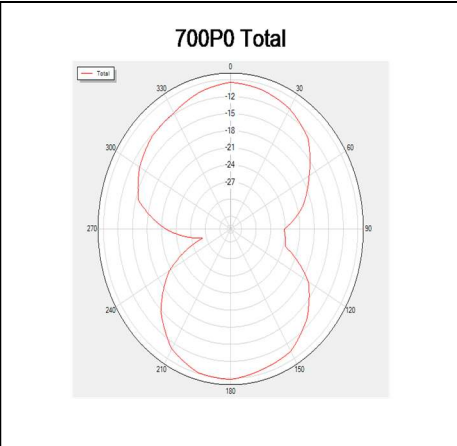
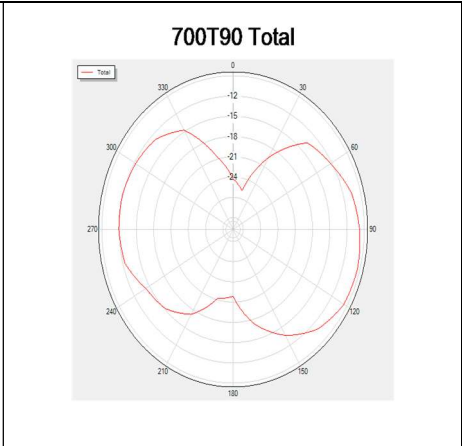
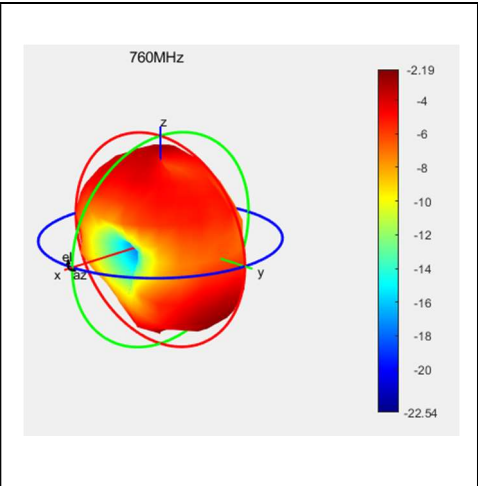
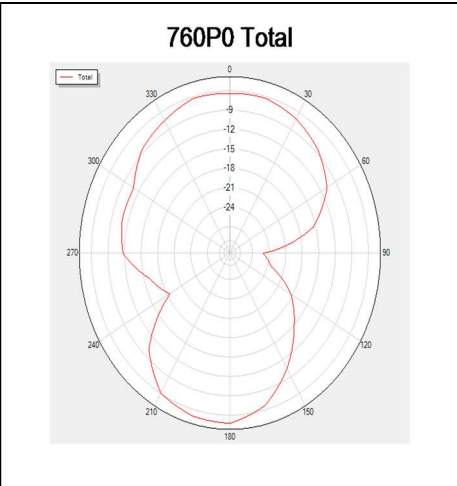
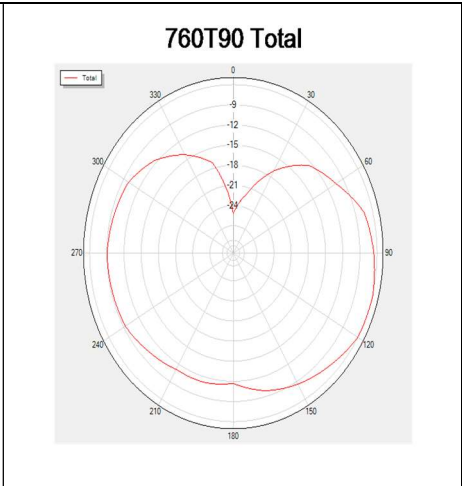
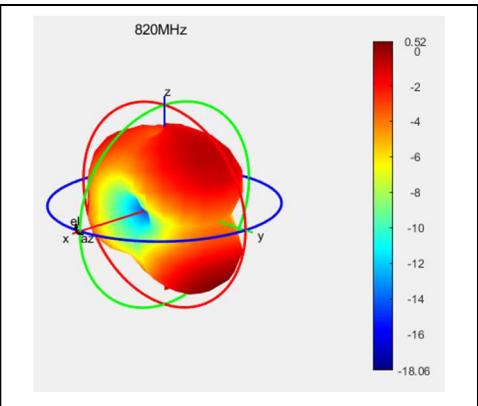
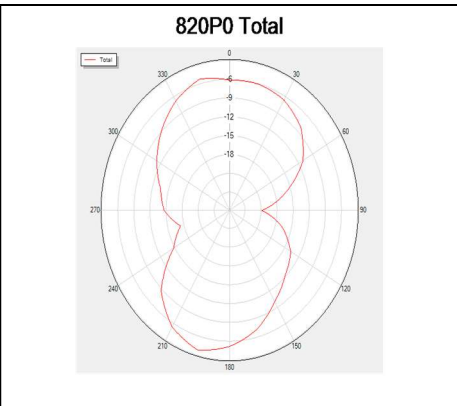
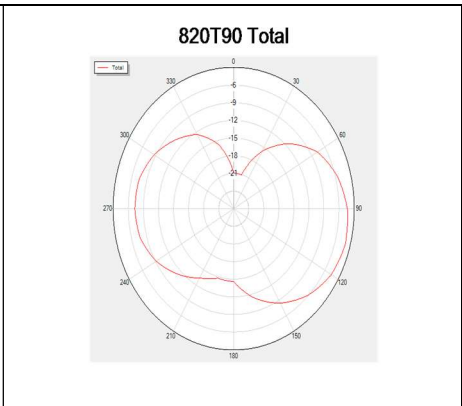
Efficiency and gain

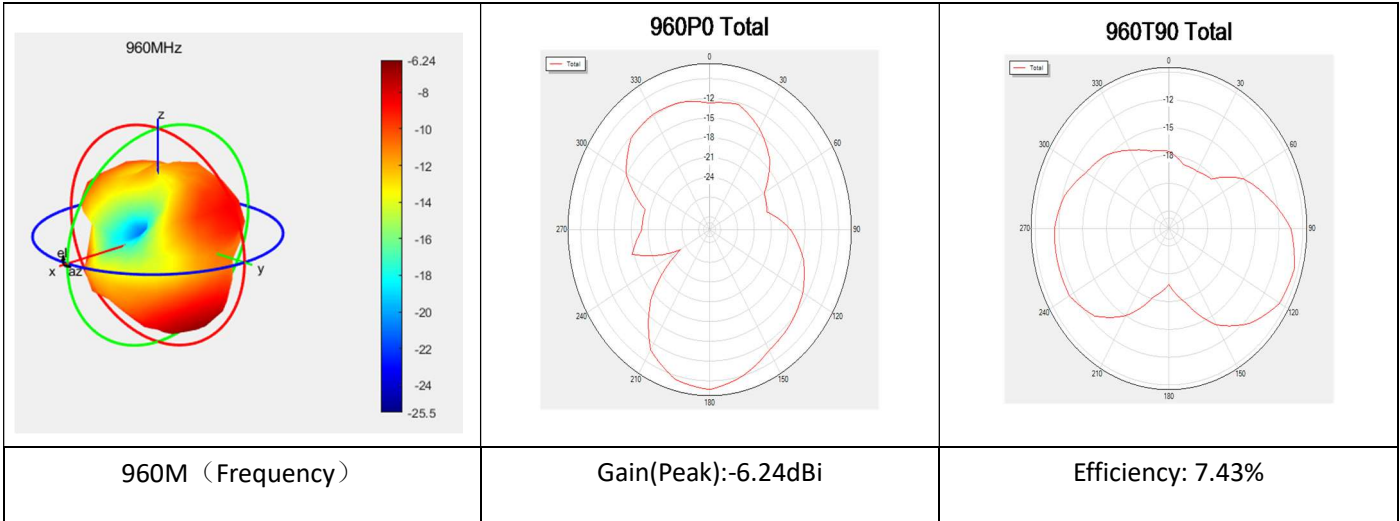
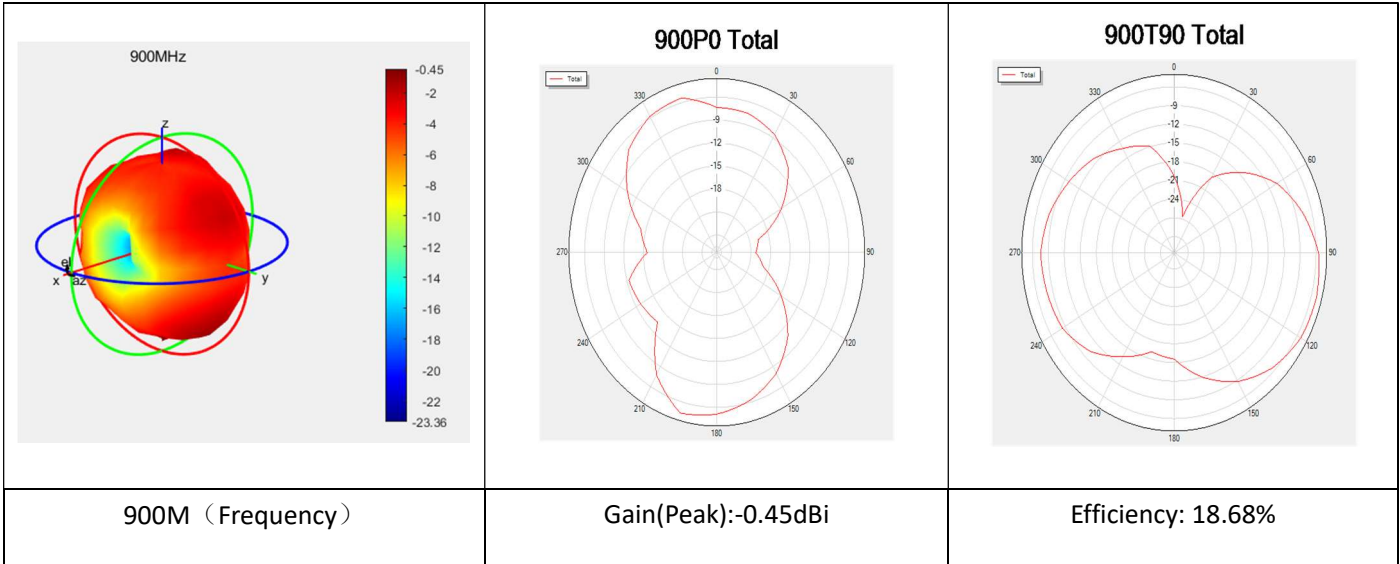
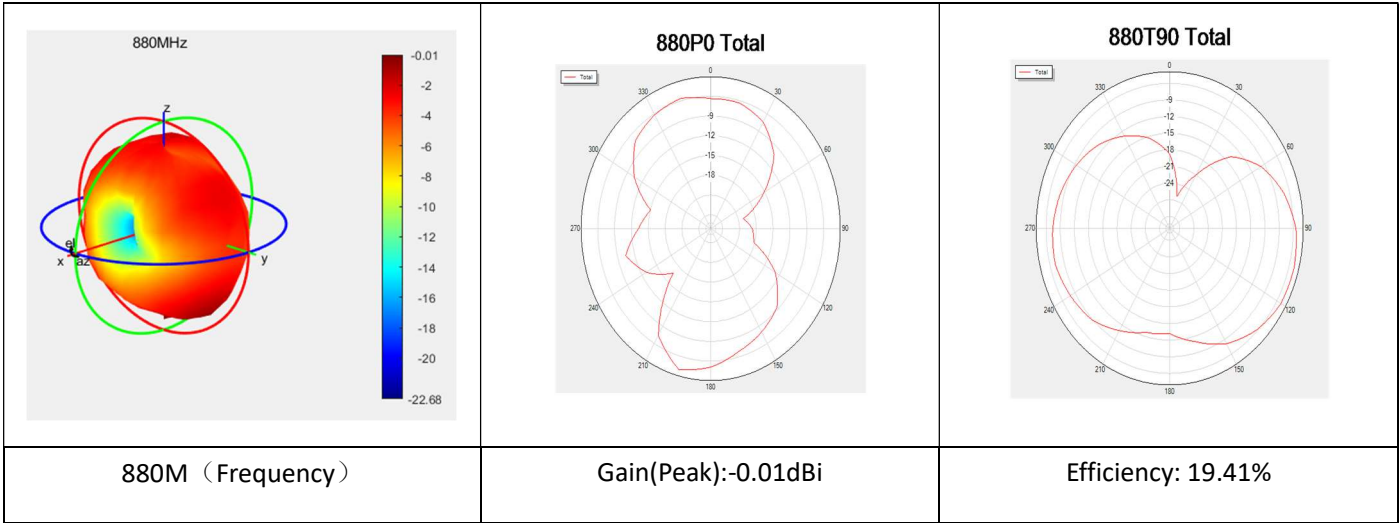
LTE					
Frequency	Efficiency	Gain	Frequency	Efficiency	Gain
700	8.47438%	-6.38693	2000	22.19474%	-2.46102
720	12.08736%	-5.2095	2050	17.75173%	-3.43759
740	17.80486%	-2.53148	2100	21.29532%	-1.70873
760	16.32111%	-2.19284	2150	32.22685%	0.43127
780	19.76809%	-1.26854	2200	29.04707%	0.16477
800	22.47988%	-1.51364	2250	30.06194%	-0.39002
820	23.6845%	0.51946	2300	30.63088%	-0.96158
840	30.21105%	1.69576	2350	40.6274%	0.35288
860	23.04288%	1.71224	2400	38.22153%	-0.40198
880	19.41101%	-0.01422	2450	34.04251%	-0.51594
900	18.68029%	-0.45296	2500	32.38964%	-0.50651
920	13.88946%	-3.23241	2550	37.62683%	0.4618
940	13.3659%	-4.15058	2560	34.84529%	-0.0387
960	7.43401%	-6.23598	2570	42.65764%	1.05661
1700	45.00984%	-0.01732	2580	33.92979%	0.14956
1750	42.06943%	-0.1225	2590	37.4108%	0.75839
1800	37.84793%	-0.50054	2600	43.83336%	1.56002
1850	36.50563%	-0.12187	2650	30.81304%	0.79049
1900	38.67862%	0.261	2700	28.3148%	0.70125
1950	37.81943%	0.09812			
GPS					
Frequency	Perce	Gain			
1575.42	37.35274%	-1.40059			

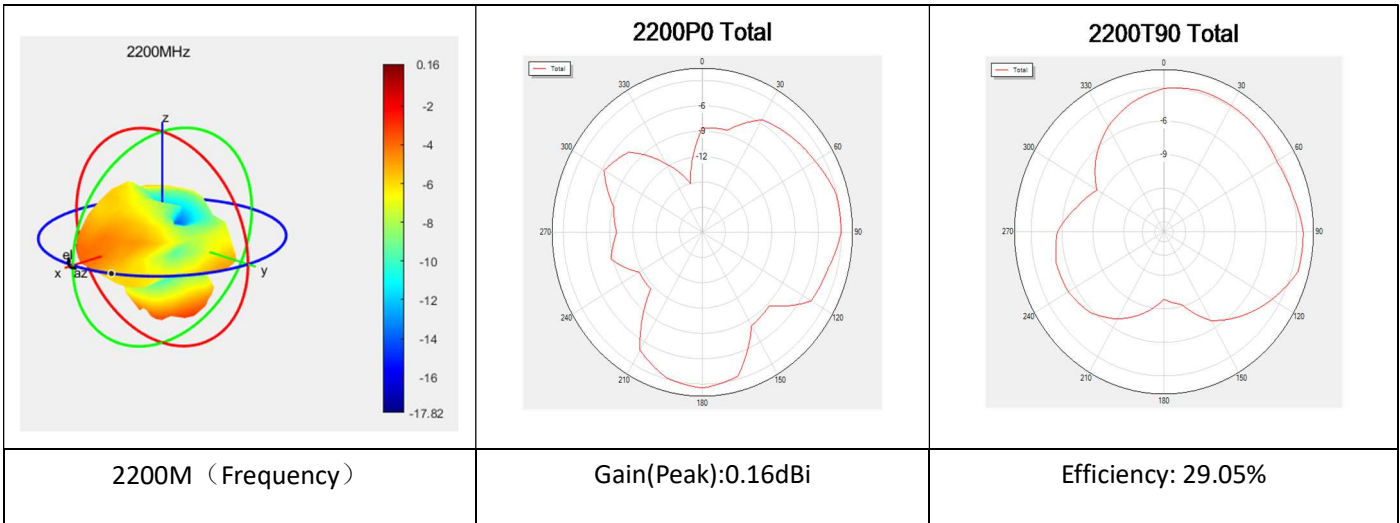
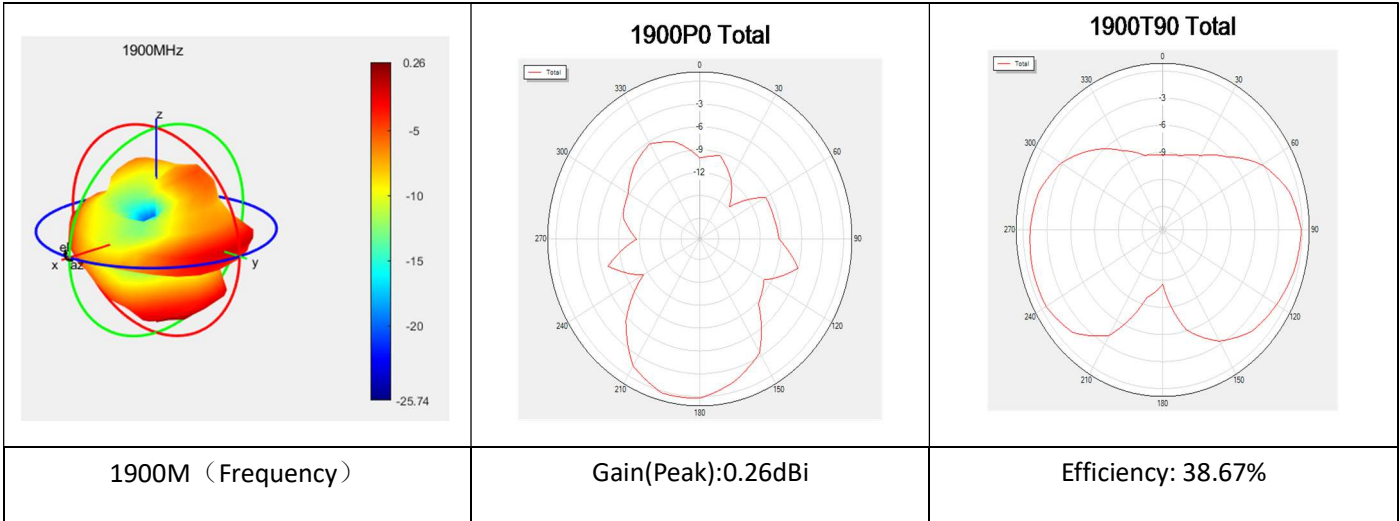
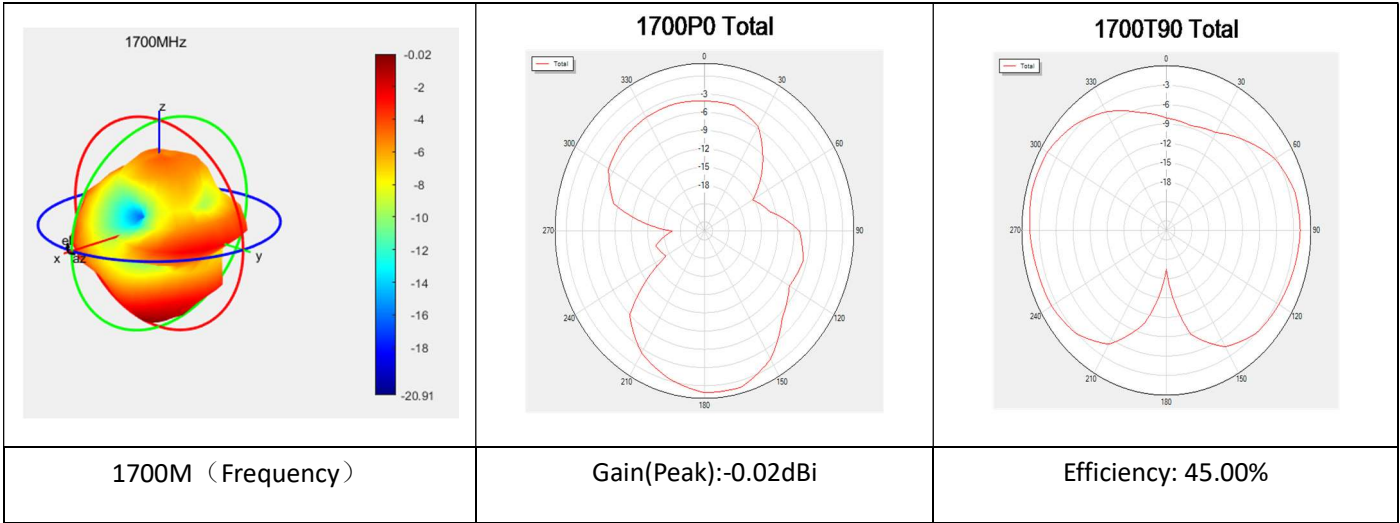
OTA report

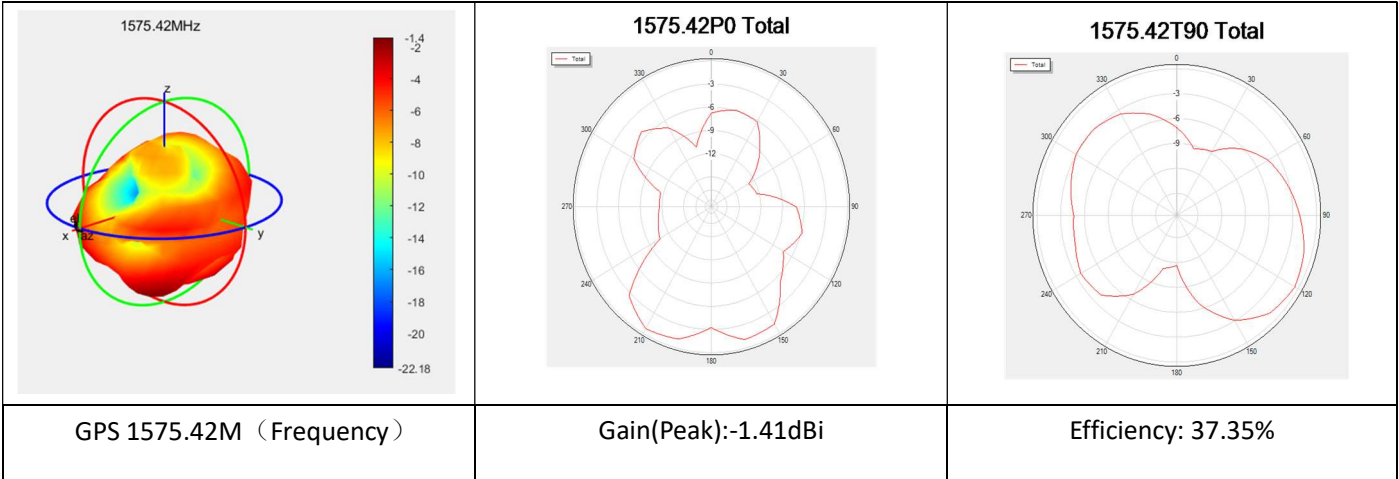
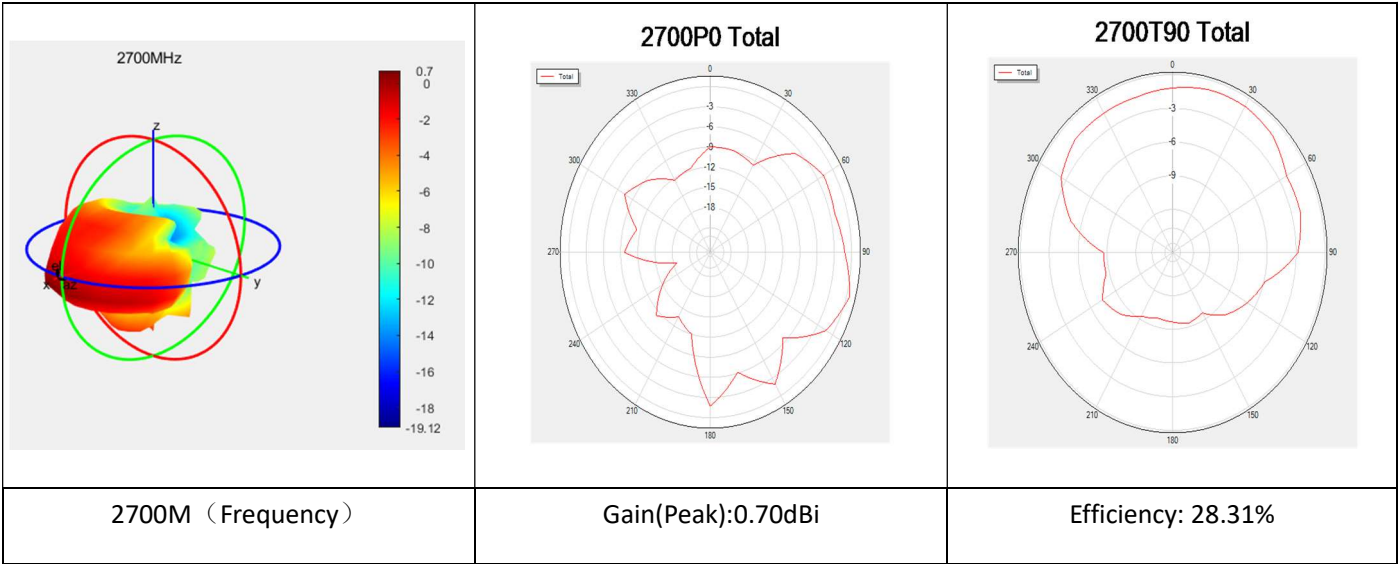
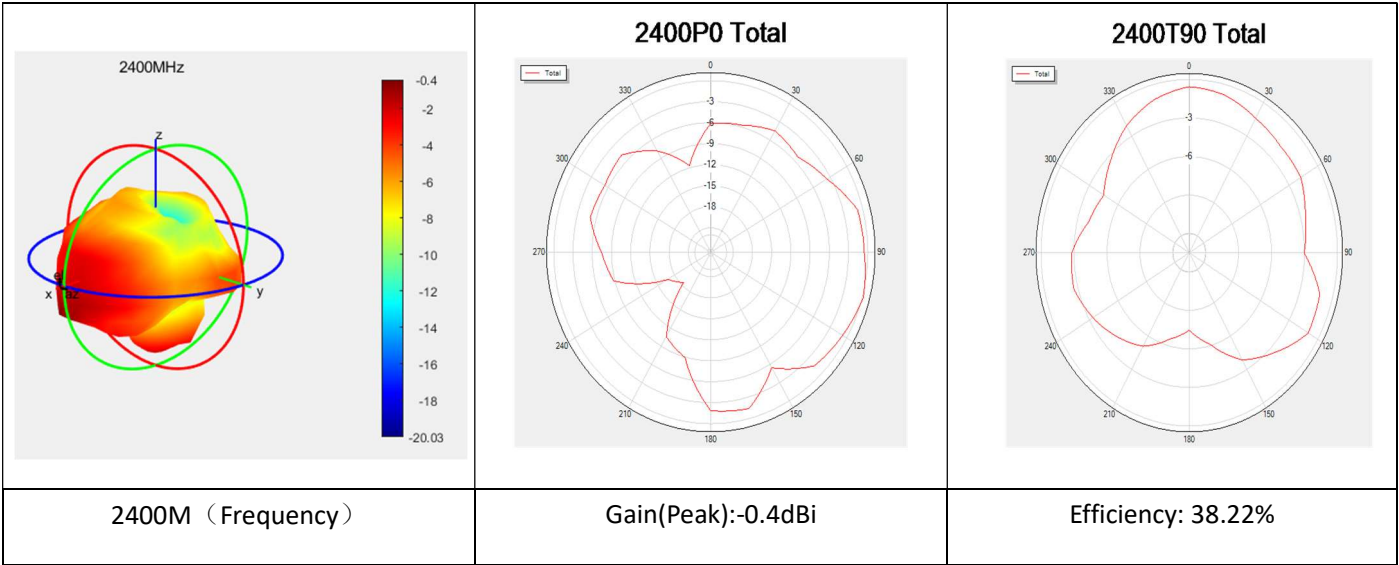
BAND	CHANNEL	TRP	TIS	NOTE
B1 (B4)	H	18.3(15.6)		
	M	19.3(16.6)		
	L	17.3(17.1)	-89.6	
B3	H	15.6		
	M	16.6		
	L	17.1	-92.8	
B7	H	18.2		
	M	18.5		
	L	18.1	-89.4	
B20	H	12.7		
	M	15.3		
	L	11.3	-85.6	
B28(B12)	H	10.1		
	M	12.1		
	L	13.4	-86.3(-83.5)	
B34	M	20.4	-93.4	
B38	H	19.6		
	M	19.5		
	L	19.3	-95.4	
B39	H	18.9		
	M	18.8		
	L	19.6	-97.8	
B40	H	15.6		
	M	15.7		
	L	15.5	-95.5	
B41	H	19.5		
	M	19.4		
	L	19.7	-96.4	
BAND	EFFICIENCY			NOTE
GPS	40%			

Field pattern diagram

 700MHz Color scale: -6.39 to -28.09	 700P0 Total	 700T90 Total
700M (Frequency)	Gain(Peak):-6.38dBi	Efficiency: 8.47%
 760MHz Color scale: -2.19 to -22.54	 760P0 Total	 760T90 Total
760M (Frequency)	Gain(Peak):-2.19dBi	Efficiency: 16.32%
 820MHz Color scale: 0.52 to -18.06	 820P0 Total	 820T90 Total
820M (Frequency)	Gain(Peak):0.52dBi	Efficiency: 23.68%







Drawing

