



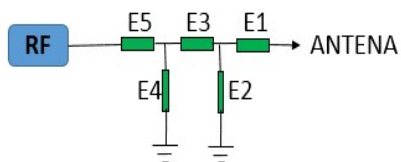
BLE Antenna Specification

Project Name	LS92F25-1	Test by		Date	2022/5/25
Project Stage		HW version		SW version	
Instruments	5071	Test darkroom	ETS		
test conclusion	Meets company standard requirements				

Manufacturer name: Zhongshan Transtek Electronics Co.,Ltd

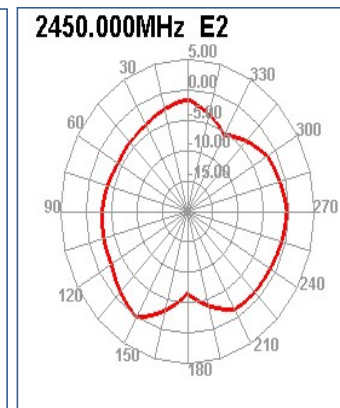
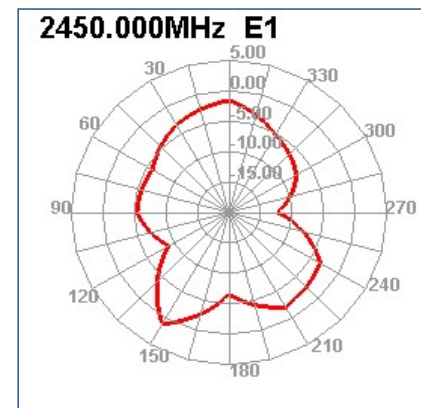
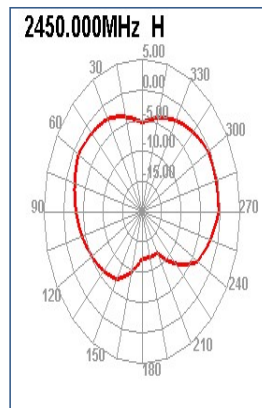
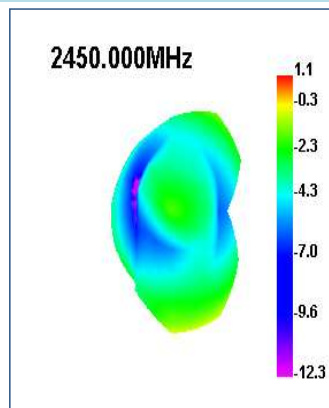
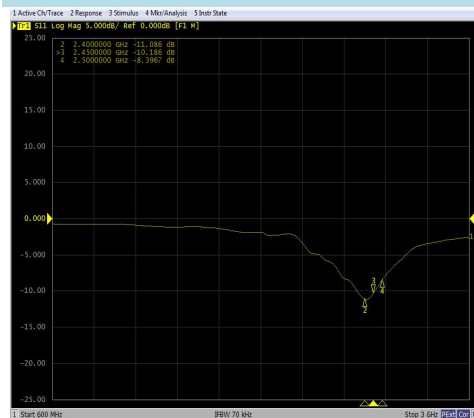
Manufacturer's address: Zone E, No. 105, Dongli Road, Torch Development District, 528437 Zhongshan, Guangdong, China

1. matching circuit



Main Antenna matching		GPS Antenna matching		BLE Antenna matching	
Element	Value	Element	Value	Element	Value
E1 (0201)	0 Ω	E1 (0201)	0 Ω	E1 (0201)	0 Ω
E2 (0201)	N/A	E2 (0201)	N/A	E2 (0201)	N/A
E3 (0201)	0 Ω	E3 (0201)	0 Ω	E3 (0201)	0 Ω
E4 (0201)	N/A	E4 (0201)	N/A	E4 (0201)	N/A
E5 (0201)	0 Ω	E5 (0201)	0 Ω	E5 (0201)	0 Ω

2. S11 parameters(Switch Logic) and Typical free space radiation patter



3. Typical free space efficiency and gain

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	40.54	-3.92	1.27
2410	42.79	-3.69	1.58
2420	39.57	-4.03	1.48
2430	46.59	-3.32	2.26
2440	38.95	-4.1	1.42
2450	44.62	-3.5	1.8
2460	36.2	-4.41	0.8
2470	40.8	-3.89	1.61
2480	36.37	-4.39	1.09
2490	39.49	-4.03	1.71
2500	34.18	-4.66	0.97

4.BLE Antenna pull distance

BLE Pull distance measurement 速率: 1Mbps			
GKS-2156-B			
Distance test: Indoor	standard	test mobile 1: apple 12	test mobile 2: redmi k40
		prototype 1#	prototype 1#
	>30米	>50m	>52m
Distance test: outdoor	standard	test mobile 1: apple 12	test mobile 2: redmi k40
		prototype 1#	prototype 1#
	>30米	>52	>55
Distance test: pass through a wall	standard	test mobile 1: apple 12	test mobile 2: redmi k40
		prototype 1#	prototype 1#
	>10米	>15m	>15m

5.Antenna position and implementation method

Antenna implementation method: onboard

