

Product Information

Client	LDS	Protocol	WiFi+BLE
Project Number	IOT221123003	Sample Quantity	2
Model Number	BL-M8192FUE	PCB Version	D-SIP-A30-01D-A-V2.0-Y1
Chip Type	RTL8192FC	Structure Version	正式模

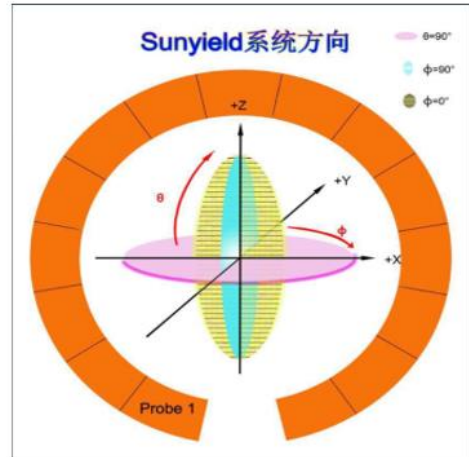
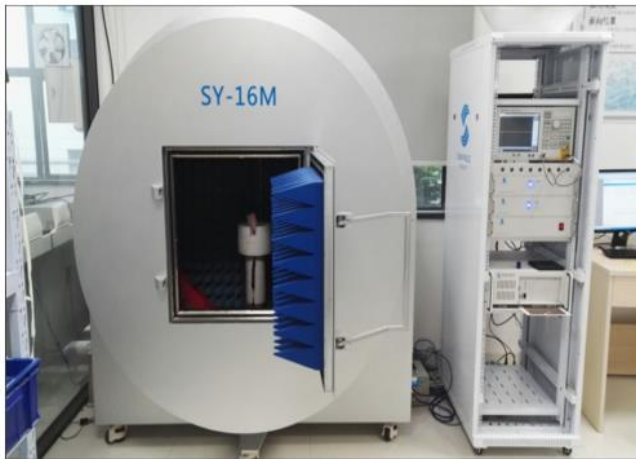
Sample Pictures



Summary

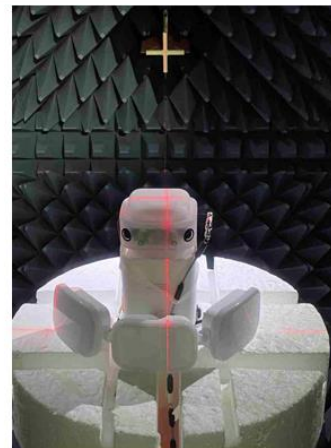
No.	Items	Index			Test Result	Conclusion
1	Efficiency (%)	A (≥45%)	B (25%~44.99%)	C (≤24.99%)	WiFi 左 2.4 G: 54% WiFi 左 5G: 49.38%	A
2	VSWR	≤2.5			1.9	PASS
3	Distance Test	WiFi 100M	BLE 10M	Zigbee 40M	100M	PASS
Author		DeYun Li			Test Date	2023.07.04
Verifier		DeYun Li			Review Date	2023.07.04
Version		V1.0			Revise Content	Reviser

## SY-16M Test System



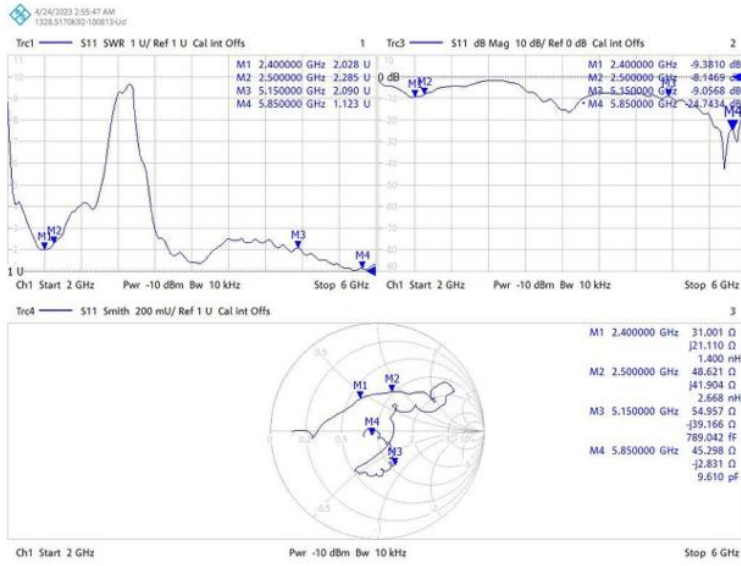
## WIFI ANT

### Sample Picture

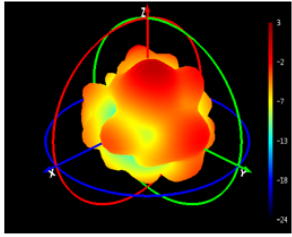
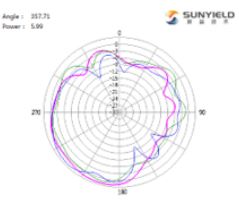
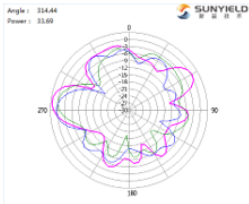



# WIFI ANT1

## VNA Data

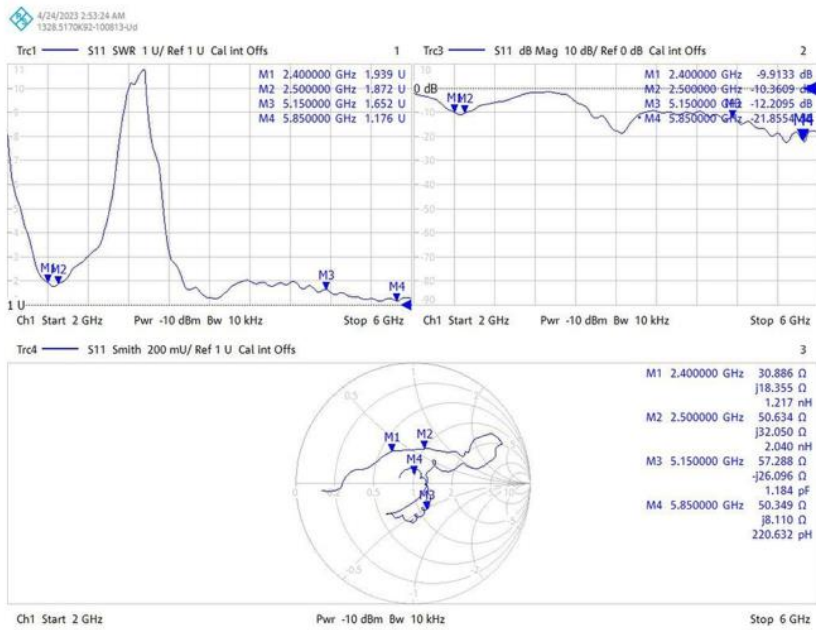


Frequency (MHz)	Gain (dBi)	Efficiency (%)	3D	$\theta = 90^\circ$ (XY Plane)
2400	2.13	54.06		
2410	2.10	54.14		
2420	2.08	54.85		
2430	2.91	53.22		
2440	2.81	53.77		
2450	2.93	54.17		
2460	2.06	54.92		
2470	2.03	53.45	$\phi = 0^\circ$ (XZ Plane)	$\phi = 90^\circ$ (YZ Plane)
2480	2.27	53.97		
2490	2.41	55.45		
2500	2.37	53.08		
MIN	2.03	53.08		
MAX	2.93	55.45		
AVG	2.37	54.10		

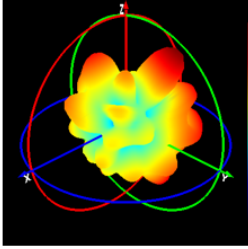
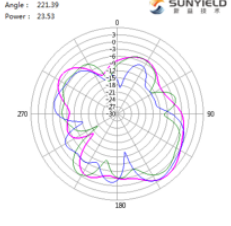
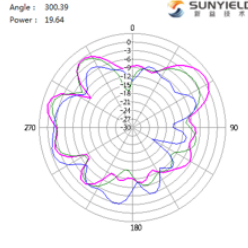
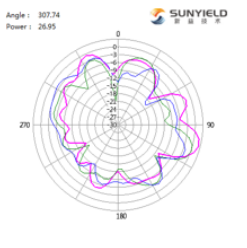
Frequency (MHz)	Gain (dBi)	Efficiency (%)	3D	$\theta = 90^\circ$ (XY Plane)
5150	2.5	48.12		
5200	2.97	52.78		
5250	2.74	48.91		
5300	3.07	53.47		
5350	3.3	53.92		
5400	3.49	51.82		
5450	3.54	56.46		
5500	2.29	51.46		
5550	3.47	47.38		
5600	2.92	45.46	$\phi = 0^\circ$ (XZ Plane)	$\phi = 90^\circ$ (YZ Plane)
5650	3.15	48.17		
5700	2.87	45.97		
5750	2.41	44.36		
5800	2.29	46.58		
5850	2.31	45.77		
MIN	2.29	44.36		
MAX	3.54	56.46		
AVG	2.89	49.38		

# WIFI ANT2

## VNA Data

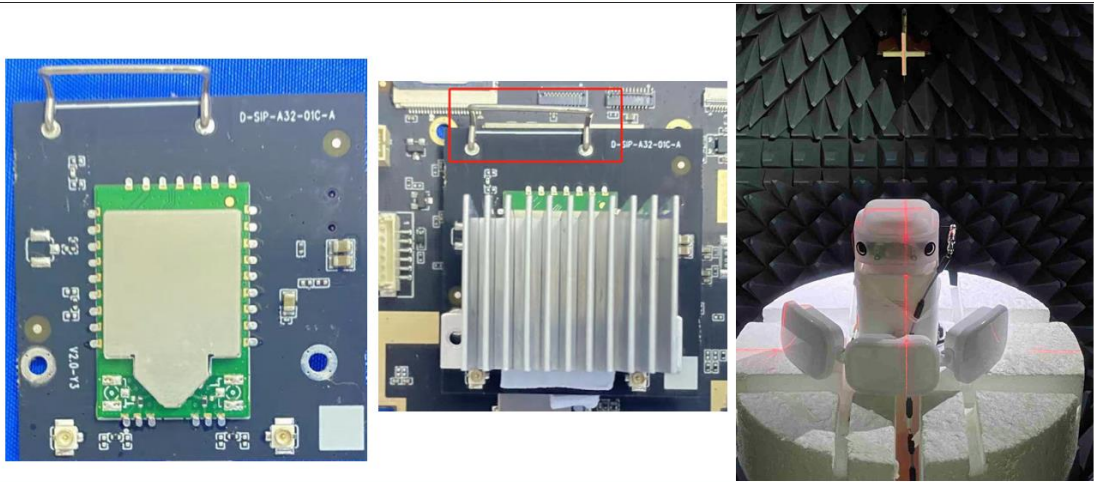


Frequency (MHz)	Gain (dBi)	Efficiency (dB)	3D	$\theta = 90^\circ$ (XY Plane)
2400	2.61	55.75		
2410	2.77	53.37		
2420	2.98	52.21		
2430	2.07	53.18		
2440	2.20	51.56		
2450	3.42	53.00		
2460	3.60	52.56		
2470	2.47	48.36	$\phi = 0^\circ$ (XZ Plane)	$\phi = 90^\circ$ (YZ Plane)
2480	2.43	51.73		
2490	2.25	51.66		
2500	2.03	56.84		
MIN	2.03	48.36		
MAX	3.60	56.84		
AVG	2.62	52.75		

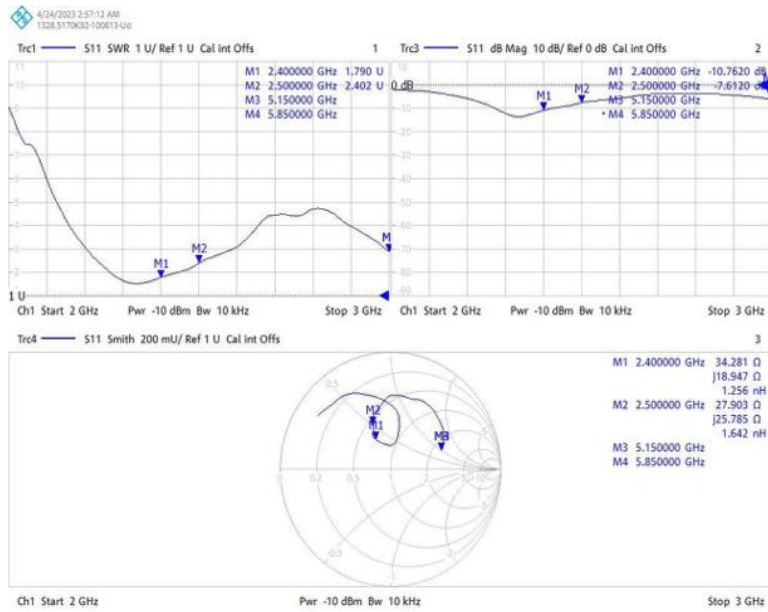
Frequency (MHz)	Gain (dBi)	Efficiency (%)	3D	$\theta = 90^\circ$ (XY Plane)
5150	2.30	51.93		
5200	2.65	54.89		
5250	2.71	54.31		
5300	2.99	55.39		
5350	3.07	56.63		
5400	3.21	57.11		
5450	3.27	49.06		
5500	2.93	46.64		
5550	2.84	49.41		
5600	2.89	48.77		
5650	3.05	49.06		
5700	3.15	51.76		
5750	3.13	49.78		
5800	3.18	49.25		
5850	3.11	50.22		
MIN	2.30	46.64		
MAX	3.27	57.11		
AVG	2.97	51.61		

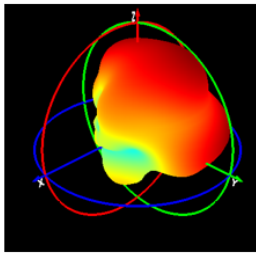
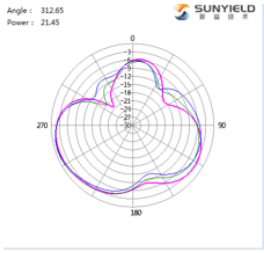
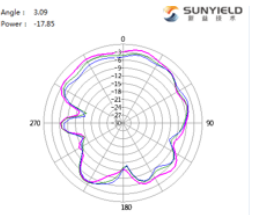
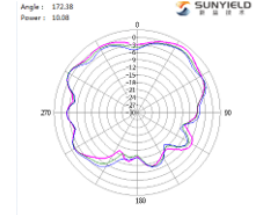
# BT ANT

Sample Picture



## VNA Data



Chamber Data				
Frequency (MHz)	Gain (dBi)	Efficiency (dB)	3D	$\theta = 90^\circ$ (XY Plane)
2400	1.26	42.06		
2410	1.23	43.06		
2420	1.25	44.21		
2430	1.27	42.37		
2440	1.23	41.72		
2450	1.25	42.71		
2460	1.17	41.14		
2470	0.88	39.66	$\phi = 0^\circ$ (XZ Plane)	$\phi = 90^\circ$ (YZ Plane)
2480	0.39	39.87		
2490	-0.21	39.43		
2500	-0.26	39.18		
MIN	-0.26	39.18		
MAX	1.27	44.21		
AVG	0.86	41.40		