

The Antenna Test Report)

Y-YB-CR-135

V001

confidentiality

Antenna Coding: XBY200674

Antenna Type: External Antenna

Model: G2

Antenna Manufacturer: Dongguan Subo Electronics Co., LTD

1、Technical Specification

Electrical Specifications	
Frequency Range (MHz)	900-930
Input Impedance (Ω)	50
Return Loss (dB)	<-12
VSWR	<1.4
Peak Gain (dBi)	3
Polarization Type	Linear polarization
Mechanical Specifications	
Antenna Size (mm)	Length: 135mm
Radiator	Cuprum

2、The result of the test

2.1 Test Environment

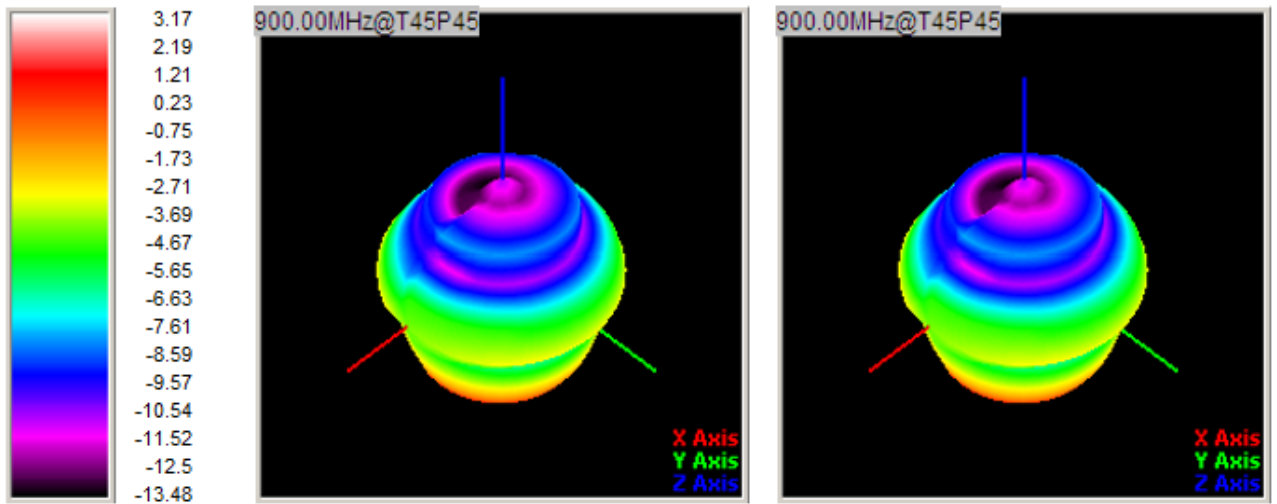


2.2 Gain and Efficiency

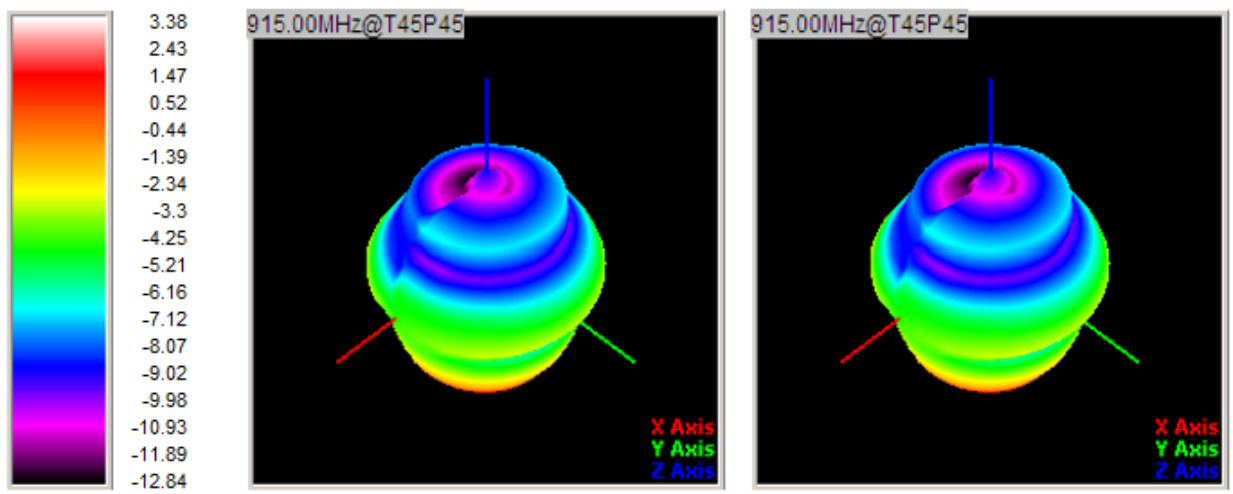
FEITUKEJI											
Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	900.0	903.0	906.0	909.0	912.0	915.0	918.0	921.0	924.0	927.0	930.0
Point Values											
Ant. Port Input Pwr. (dBm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tot. Rad. Pwr. (dBm)	-3.13	-3.21	-3.24	-3.21	-3.15	-3.15	-3.23	-3.34	-3.42	-3.50	-3.61
Peak EIRP (dBm)	3.17	3.10	3.14	3.22	3.33	3.38	3.29	3.18	3.14	3.08	2.98
Directivity (dBi)	6.30	6.31	6.38	6.43	6.48	6.53	6.52	6.52	6.56	6.58	6.60
Efficiency (dB)	-3.13	-3.21	-3.24	-3.21	-3.15	-3.15	-3.23	-3.34	-3.42	-3.50	-3.61
Efficiency (%)	48.60	47.70	47.40	47.80	48.40	48.50	47.50	46.30	45.50	44.60	43.50
Gain (dBi)	3.17	3.10	3.14	3.22	3.33	3.38	3.29	3.18	3.14	3.08	2.98
NHPRP $\pm\pi/4$ (dBm)	-6.15	-6.26	-6.33	-6.32	-6.28	-6.28	-6.33	-6.41	-6.46	-6.50	-6.57
NHPRP $\pm\pi/6$ (dBm)	-8.12	-8.24	-8.31	-8.28	-8.20	-8.18	-8.21	-8.29	-8.33	-8.35	-8.39
NHPRP $\pm\pi/8$ (dBm)	-9.20	-9.32	-9.38	-9.35	-9.28	-9.27	-9.32	-9.42	-9.49	-9.54	-9.63
Upper Hem. PRP (dBm)	-10.34	-10.40	-10.38	-10.27	-10.13	-10.05	-10.03	-10.07	-10.08	-10.09	-10.12
Lower Hem. PRP (dBm)	-4.05	-4.13	-4.17	-4.16	-4.12	-4.14	-4.25	-4.38	-4.47	-4.58	-4.71
Upper Hem. PRP (%)	9.24	9.12	9.16	9.40	9.71	9.89	9.92	9.85	9.81	9.80	9.73
Lower Hem. PRP (%)	39.38	38.60	38.29	38.38	38.72	38.57	37.61	36.49	35.71	34.82	33.79

2.3 2D Radiation Pattern

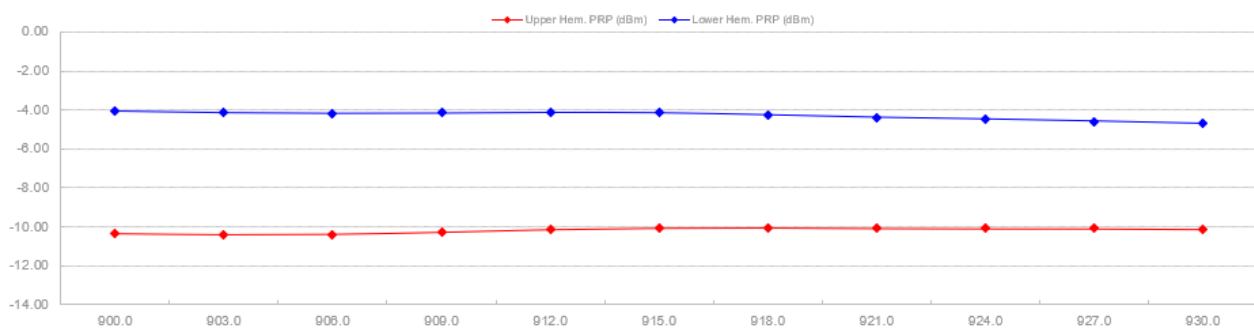
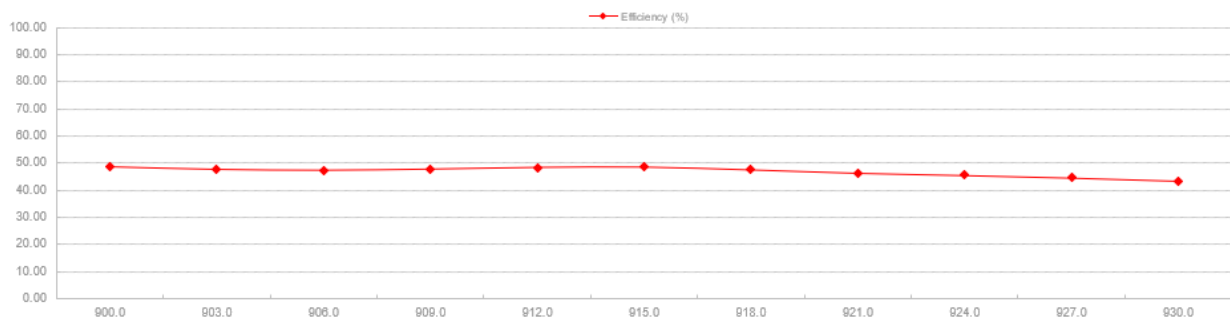
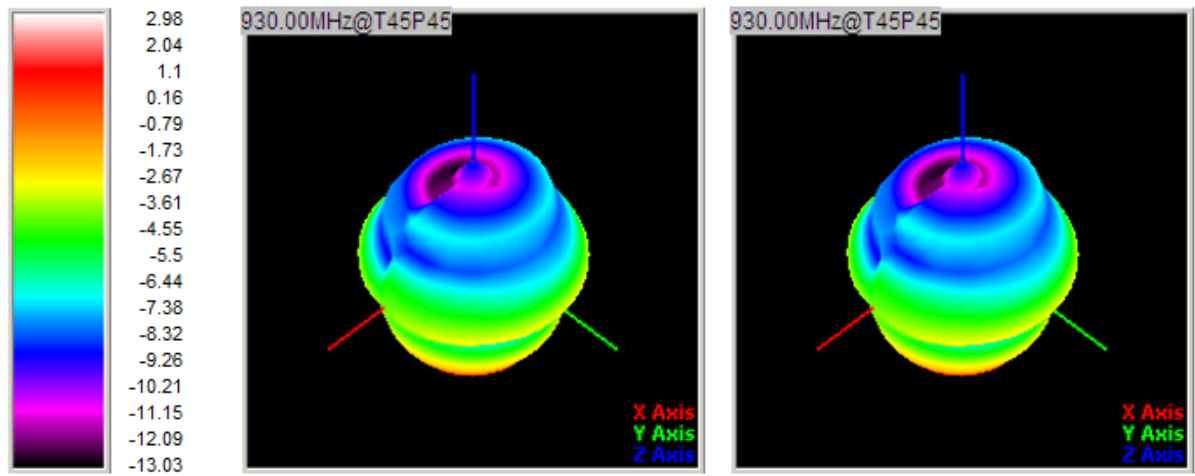
(1) E1, XZ Plane, $\phi=0$



(2) E2, YZ Plane, $\phi=90^\circ$



(3) H, XY plane, $\theta=90^\circ$



REV.		RELEASE AND CHANGE SUMMARY		DATE	
A1		首次发行		22.09.28	

Electrical Specifications:	
1. Impedance: 50 Ω	
2. Frequency: 915 MHz	
3. VSWR: <2.0	
4. RoHS Compliant	

GENERAL TOLERANCE: UNLESS OTHERWISE SPECIFIED		FILE TYPE: 产品图		Dongguan Subo Electronics Co., LTD	
LINEAR: 0.5X L ≤6 ±0.05 6X L ≤30 ±0.10 30X L ≤120 ±0.20		DRA./DATE: Xiu He/22.09.28		TITLE:	
ANGULAR: 0° L ≤10 ±1° 30' 10° L ≤50 ±1° 00' 50° L ≤120 ±0° 30'		CHE./DATE: ***		射頻天线组件 直连式外置天线, CD417 黑色, 铜管+弹簧, SMA公头公针 (915MHz)	
		APP./DATE: ***		CODE:	
		FILE FORM: QR-E-03 22.09.01		Y-YB-CR-135	
		UNIT: mm		PRO: 3rd	
		SIZE: A4		SCALE: 1:1	
		Q'TY		PAGE: 1/1	

PART NAME & DESCRIPTION		PART NUMBER		REMARKS	
下固定座, Ø9.40×L19.7×Ø6.85, PC, 黑色		2SBKJ34N2		1 ---	
上固定座, Ø10.00×L20.90, PC, 黑色		2SBKJ30N1		1 ---	
杆套, Ø10.00×L104.00, TPEE, 黑色		2SBKG0400		1 ---	
弹簧, //, 黄铜		//		1 ---	
接地管, Ø5.2×L23.0×Ø1.55, 锌合金镀镍		2YG030		1 ---	
SMA 公针ØD: 1.5×L10.2mm, 镀金2u''		2LC15PM804-5		1 ---	
SMA公头, 塑胶外壳, 黑色, 小孔		2LC15PM808-8		1 ---	
RG178同轴电缆, 银锡线, 透明棕色		2C5R17811BN1		1 依裁线图作业	

裁线图		RG178, 银锡线, 透明棕色	
[1] 137.00±2.00		[3] 82.0±0.5	
[2] 104.00±2.00		[4] 31.0±0.20 镀锡	
[5] 4.00±0.20		[6] 1.50±0.20	
[7] 4.20±0.20 镀锡		[8] 1.50±0.20	

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