

8				7				6				5				4				3				2				1							
																Reversion				Engineering Change Description								Date				Owner			
																P0				首次								2024-12-20				靳静			

Manufacturer:Guangzhou Jumei Keji You Xian Gong Si
Address:1124 Bldg. 1,Xiajiao Commercial Bldg,No. 35 Xiajiao South Road,Panyu Dist,Guangzhou,China



9	Antenna Cap	ABS ,Color:Black	PLA1014XA. B01	1
8	Paste+EVA (防水)	14. 0*6. 0*4. 0*5. 0MM	EVA10471A. P01	1
7	Paste+EVA	18. 0*8. 0*2. 0MM	EVA10408A. P01	1
6	PCB	106. 0*13. 3*0. 8MM	PCB10506B. P01	1
5	Coaxial Cable	0. D. 1. 13 Black Low loss	COA10001A. P02	1
4	Paste+EVA	8. 0*3. 0*2. 0MM	EVA10408A. P01	2
3	Rivet		PIN1000XA. B01	2
2	Bottom Base	POM, Color:Black	PLA1003XA. B04	1
1	SMA Male	Cu	CON10244A. P01	1
NO	PART NAME	DESCRIPTION	PART NO.	Q. TY

PARTS LIST

Tolerance					CAD GENERATED DRAWING, DO NOT MANUALLY UPDATE		DAM-A2-N7-N0-000-65-13 天线机构图			
CLASS SPEC.	A	B	C	D	APPROVALS					
< 8mm	0.05	0.1	0.1	0.2	DRAWN		靳静			
8~25mm	0.08	0.15	0.15	0.3	CHECKED		董明辰			
25~80mm	0.12	0.2	0.25	0.4	RESP ENG					
80~250mm	0.25	0.3	0.4	0.6	QUAL ENG					
ANGLE	0.5									
MATERIAL	As mension						SIZE A4	DWG. NO.	DATE: 2024. 12. 20	REV. Ax
FINISH	---				Scale : 1 : 1		CAD FILE:			SHEET 1 OF 1

DAM-A2-N7-N0-000-65-13

1. Explanation of Part Number

DAM	A2	N7	N0	000	65	13
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Product type : DAM-Dipole Antenna Module

(2) Appearance Series : A2

(3) Frequency :N7= 902~928MHz &1420~1450MHz &2400~2485MHz
&5150~5850MHz

(4) Coaxial Cable Specification : N0=No Cable

(5) Coaxial Cable Length : 000

(6) Connector Types :65= SMA- 180°公头公针

(7) Suffix for special requirements : 13

※ RoHS Compliant

2. Electrical properties:

Item	Property
Frequency Range	902~928MHz&1420~1450MHz 2400~2485MHz& 5150~5850MHz
Impedance	50 Ω (Typ.)
VSWR	6.0MAX@902~928MHz 3.0MAX@1420~1450MHz 4.0MAX@2400~2485MHz 3.0MAX@5150~5850MHz
Peak Gain	-0.77dBi@902~928MHz 1.24dBi@1420~1450MHz 2.94dBi@2400~2485MHz 3.37dBi@5150~5850MHz

*此款天线为客户自行设计，仅有单天线电性，无装机电性。

2-1 Antenna Performance Test

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=N/R X.X=N/R X.XX =N/R

ANGLES=N/R HOLEDIA=N/R

SCALE : N/R

UNIT : mm

DRAWN BY : 靳静

CHECKED BY : 赵付辉

DESIGNED BY : 董明辰

APPROVED BY : 赵付辉

TITLE : DAM-A2-N7-N0-000-65-13 工规

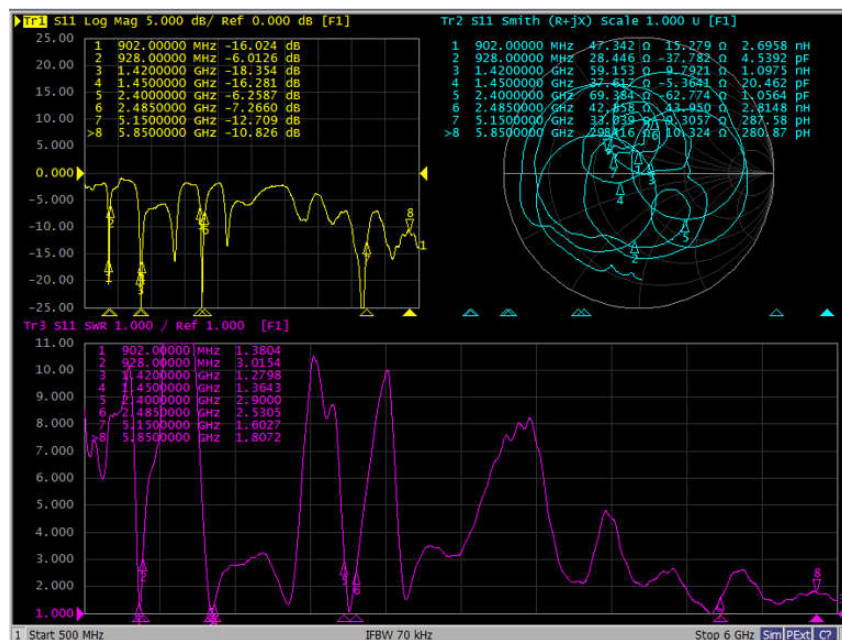
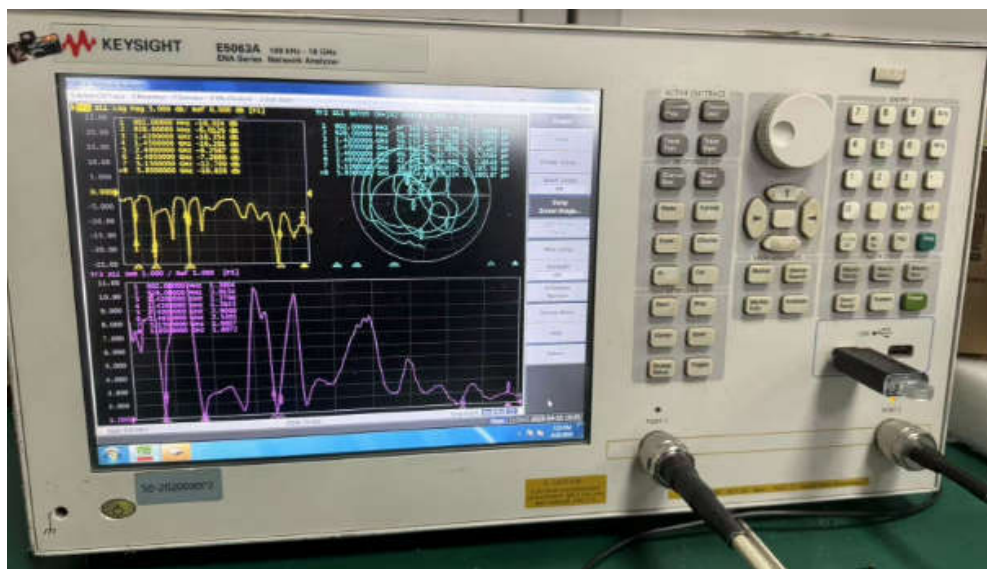


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*此款天线为客户自行设计，仅有单天线电性，无装机电性。

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=N/R X.X=N/R X.XX =N/R

ANGLES=N/R HOLEDIA=N/R

SCALE : N/R

UNIT : mm

DRAWN BY : 靳静

CHECKED BY : 赵付辉

DESIGNED BY : 董明辰

APPROVED BY : 赵付辉

TITLE : DAM-A2-N7-N0-000-65-13 工规

DOCUMENT

NO.

SPEC REV.

P3

2-2 Gain and Radiation Pattern

2-2.1 Measure method

- 1. Using a low loss coaxial cable to link a standard handset jig
- 2. Fixed this handset jig on chamber's rotator plane
- 3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
- 4. Using another standard gain horn antenna to calibrated those data

2-2.2 Chamber definition

■ 量测仪器: 微波暗室, 网络分析仪, 标准天线.

■ 微波暗室说明:

这是本公司设置在深圳的微波暗室, 本微波暗室是属于一套远场量测系统,暗室的大小为 2.6 米 x1.6 米 x1.6 米 , 静区尺寸(Quiet zone)大小为 15 厘米 x15 厘米 x15 厘米。

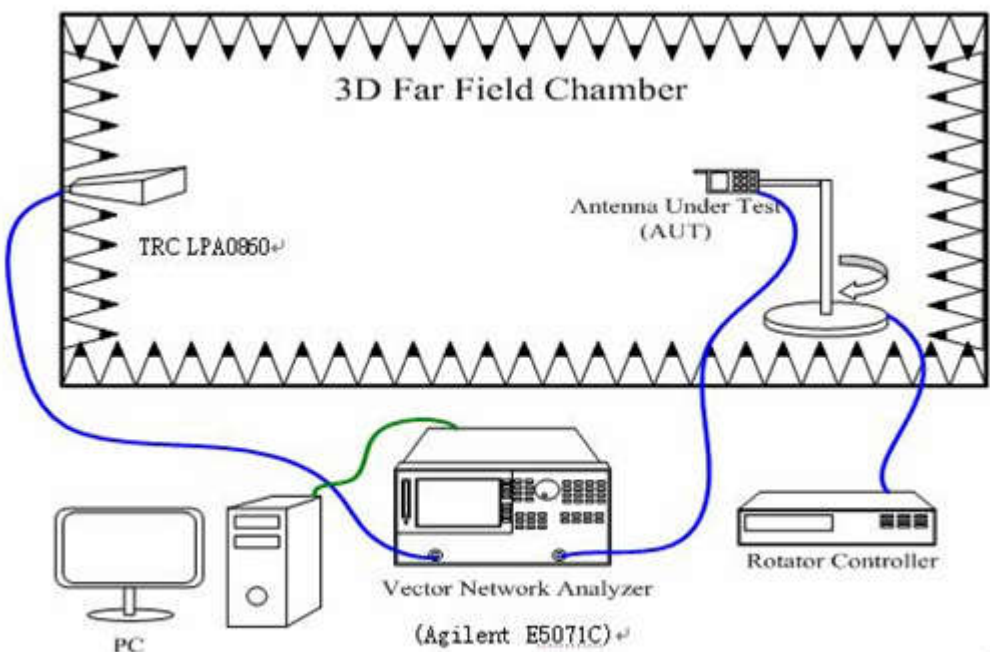


图. 1. 微波暗室内部仪器设置 r.+

图. 1 为微波暗室内的仪器设置及网络分析仪的联接图, 发射天线(本暗室所使用发射天线的型号为 TRC LPA0860 800MHZ-6GHZ)到待测天线(AUT)的距离为 1.35 米, 待测天线放置在旋转平台上,藉由控制转台旋转的角度可对待测天线做概略性及较为准确的量测。

将待测天线放置于旋转台上,并测得其各个平面(ZY 平面及 ZX 平面)的 360 度场强数据。再将待测天线换置成标准偶极天线(本暗室所使用的标准偶极天线型号为 TRC AD series dipole antenna 800MHz~2500MHz)将其 360 度的场强数据测出, 以作换算增益标准值, 经由式 1 的换算即可获得待测天线的增益值及方向图。

$$G_{AUT} = G_{stand} + P_{AUT} - P_{stand}$$

G_{AUT} : Gain of AUT
 G_{stand} : Gain of Standard Gain Antenna
 P_{AUT} : Measured Power of AUT
 P_{stand} : Measured Power of Standard Gain Antenna

UNLESS OTHER SPECIFIED T
X=N/R X.X=N/R
ANGLES=N/R
SCALE : N/R
DRAWN BY : 靳静
DESIGNED BY : 董明辰

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2-2.3 Efficiency & Gain (dBi)

Test Condition	Average gain (dB)	Efficiency (%)	Peak Gain (dBi)
902	-2.66	54.2	-1.84
904	-2.92	51.05	-2.46
906	-2.55	55.59	-2.04
908	-2.73	53.39	-1.28
910	-2.56	55.46	-1.12
912	-2.98	50.39	-1.51
914	-2.99	50.28	-1.66
916	-3.16	48.34	-1.17
918	-3.12	48.75	-0.84
920	-3.25	47.34	-1
922	-3.28	46.99	-1.88
924	-3.47	44.98	-2.02
926	-3.86	41.08	-1.3
928	-3.89	40.82	-0.77
1420	-1.56	69.82	1.24
1425	-1.63	68.71	0.71
1430	-1.37	72.95	0.74
1435	-1.64	68.55	0.41
1440	-1.56	69.82	1.24
1445	-1.63	68.71	0.71
1450	-1.37	72.95	0.74

UNLESS OTHER SPECIFIED TOLERANCES ON :
X=N/R X.X=N/R X.XX =N/R
ANGLES=N/R HOLEDIA=N/R



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SCALE : N/R UNIT : mm
DRAWN BY : 靳静 CHECKED BY : 赵付辉
DESIGNED BY : 董明辰 APPROVED BY : 赵付辉

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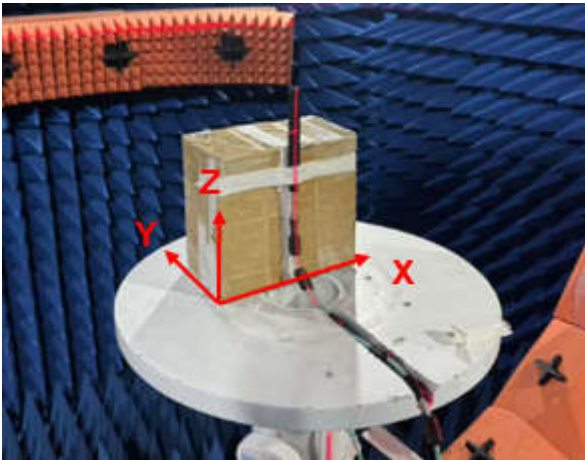
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Test Condition	Average gain (dB)	Efficiency (%)	Peak Gain (dBi)
2400	-3.68	42.89	0.28
2410	-3.47	44.99	1.05
2420	-3.61	43.55	1.65
2430	-2.85	51.88	2.41
2440	-3.02	49.89	2.39
2450	-2.68	53.95	2.94
2460	-3.21	47.75	2.41
2470	-3.18	48.08	2.7
2480	-3.61	43.55	2.21
2485	-3.65	43.15	2.25
5150	-3.53	44.36	2.64
5250	-3.67	42.95	2.18
5350	-2.88	51.52	3.04
5450	-2.31	58.75	3.13
5550	-1.64	68.55	3.37
5650	-1.65	68.39	3.32
5750	-1.47	71.29	2.99
5850	-1.88	64.86	2.94

*此款天线为客户自行设计，仅有单天线电性，无装机电性。

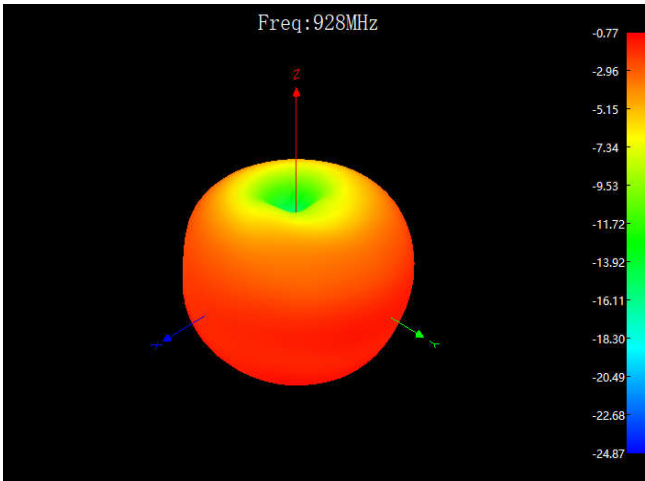
UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/R X.X=N/R X.XX =N/R ANGLES=N/R HOLEDIA=N/R			
SCALE : N/R	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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2-2.4 Antenna Passive Test



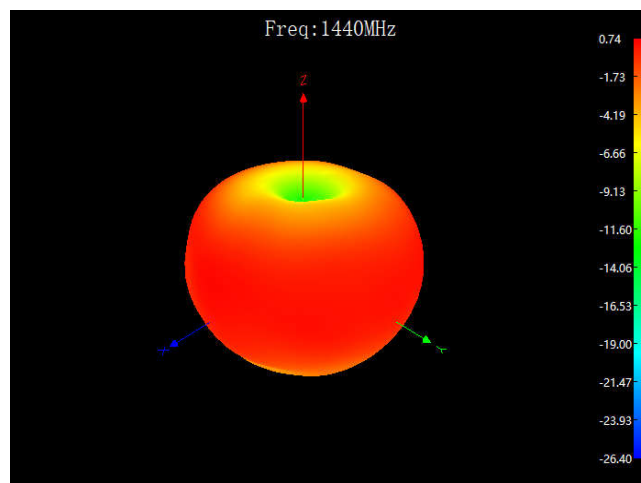
2-2.5 3D Radiation Pattern

928MHz:

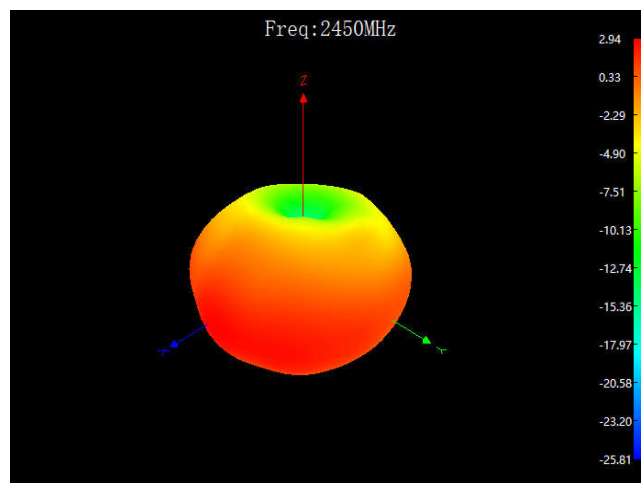


1440MHz:

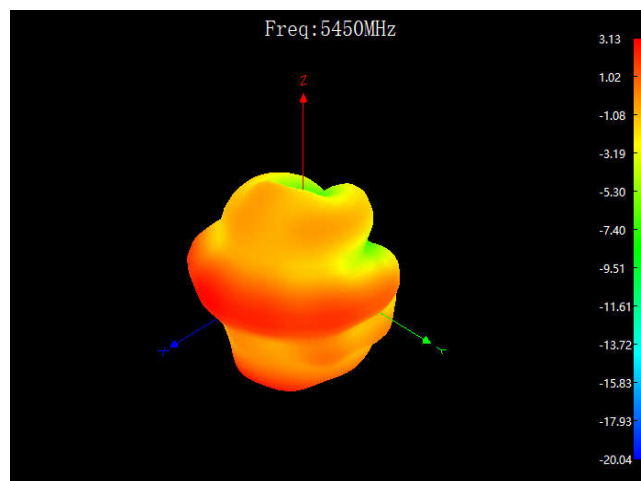
UNLESS OTHER SPECIFIED TOLERANCES ON :			
X=N/R	X.X=N/R	X.XX =N/R	
ANGLES=N/R		HOLEDIA=N/R	
SCALE : N/R	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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2450MHz:



5450MHz:



UNLESS OTHER SPECIFIED TOLERANCES ON :			
X=N/R	X.X=N/R	X.XX =N/R	
ANGLES=N/R	HOLEDIA=N/R		
SCALE : N/R	UNIT : mm	THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
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