



深圳市安威无线科技有限公司

行业领先的一站式通信射频天线解决方案制造商

Shenzhen Anwei Wireless Technology Co., Ltd

L240 Test Report

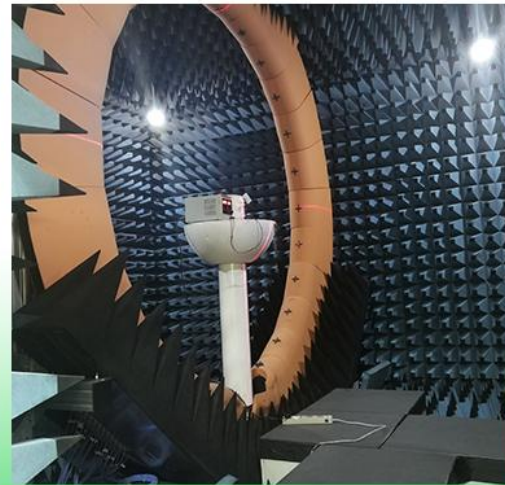
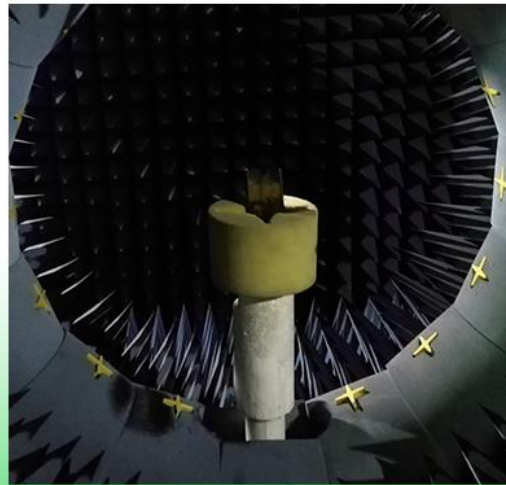
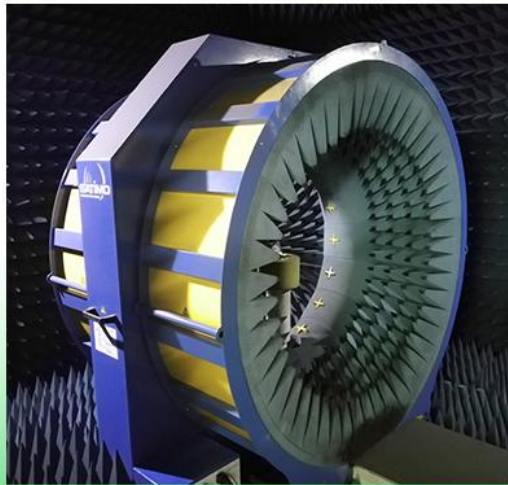
Anwei RF: Xulong

Mobile number: 15915343126

Address: 2nd Floor, Building 5, Hualian Industrial Park, Huaning Road, Dalang Street, Longhua District, Shenzhen

Time: 2025.7.2

携手共进 共创未来



安威无线一直都是您值得信赖且优秀的合作伙伴，我们为您提供全方位一站式的产品以及技术服务！

“质量第一，服务至上”是安威一直以来的发展宗旨

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www.aw168.cn

Main antenna test data (free)

ANWEI ANT TRP&TIS parameter Summary of L240						
BAND	GSM900			DCS1800		
CHANNEL	1	62	124	512	698	885
TRP (dBm)	27. 26	27. 35	27. 34	24. 67	25. 16	25. 42
TIS (dBm)			-102. 9			-103. 3
BAND	GSM850			PCS1900		
CHANNEL	128	190	251	512	661	810
TRP (dBm)	25. 23	25. 76	26. 58	25. 48	25. 36	25. 27
TIS (dBm)			-102. 6			-102. 8
BAND	WCDMA2100			WCDMA850		
CHANNEL	10562	10700	10838	4132	4183	4233
TRP (dBm)	17. 62	17. 34	16. 58	16. 12	17. 13	17. 32
TIS (dBm)			-102. 7			-103. 2
BAND	WCDMA1900			WCDMA900		
CHANNEL	9262	9400	9538	2937	3013	3088
TRP (dBm)	17. 45	17. 49	17. 43	17. 32	17. 26	17. 31
TIS (dBm)			-102. 8			-102. 5

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Main antenna test data (free)

ANWEI ANT TRP&TIS parameter Summary of L240						
BAND	FDD-1			FDD-2		
CHANNEL	18100	18300	18500	18650	18900	19150
TRP (dBm)	18. 13	17. 52	17. 24	17. 32	17. 36	17. 49
TIS (dBm)			-90. 51			-91. 87
BAND	FDD-3			FDD-4		
CHANNEL	19250	19575	19900	20000	20175	20350
TRP (dBm)	17. 42	17. 51	17. 48	17. 45	17. 59	17. 61
TIS (dBm)			-90. 36			-91. 68
BAND	FDD-5			FDD-7		
CHANNEL	20450	20525	20600	20800	21100	21400
TRP (dBm)	16. 23	17. 21	17. 48	17. 32	17. 36	17. 28
TIS (dBm)			-90. 23			-91. 12
BAND	FDD-8			FDD-12		
CHANNEL	21500	21625	21750	23780	23790	23800
TRP (dBm)	17. 41	17. 32	17. 36	11. 28	11. 53	11. 69
TIS (dBm)			-89. 45			-86. 23

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Main antenna test data (free)

ANWEI ANT TRP&TIS parameter Summary of L240						
BAND	FDD-20			FDD-28A		
CHANNEL	24200	24300	24400	27260	27370	27469
TRP (dBm)	17.23	17.36	17.48	11.62	11.75	12.16
TIS (dBm)			-88.69			-87.61
BAND	FDD-28B			TDD-34		
CHANNEL	27410	27510	27600	36250	36275	36300
TRP (dBm)	11.47	12.68	13.28	17.23	17.63	17.42
TIS (dBm)			-87.68			-88.87
BAND	TDD-38			TDD-39		
CHANNEL	37850	38000	38150	38350	38450	38550
TRP (dBm)	17.38	17.38	17.32	17.52	17.61	17.41
TIS (dBm)			-89.67			-90.32
BAND	TDD-40			TDD-41		
CHANNEL	38750	39150	39550		40620	
TRP (dBm)	17.45	17.52	17.59		17.21	
TIS (dBm)			-89.67		-88.65	

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Main antenna test data (free)

ANWEI ANT TRP&TIS parameter Summary of L240						
BAND	CDMA					
CHANNEL	1013	384	777			
TRP (dBm)	16. 54	17. 36	17. 46			
TIS (dBm)			-101. 2			
BAND						
CHANNEL						
TRP (dBm)						
TIS (dBm)						

GPS

testing item	test result
Total number of search stars	seven
In terms of the number of satellites used	seven
Maximum SNR value	forty-one
SNR $\geq$ 40 stars	three
Cold start positioning time	48 seconds



WiFi

Standard	Band	Channel	Frequency	TRP	TIS
WIFI_B	B_11M	1	2412	11.23	-81.23
WIFI_B	B_11M	6	2437	11.16	-81.06
WIFI_B	B_11M	11	2462	11.35	-81.54
WIFI_A	A_54M	36	5180	10.23	-71.32
WIFI_A	A_54M	64	5320	12.18	-73.61
WIFI_A	A_54M	165	5745	12.56	-72.59

Band	Gain
TDD_B34 (2010-2025MHz)	1.4
TDD_B38 (2570-2620MHz)	1.7
TDD_B39 (1880-1920MHz)	1.4
TDD_B40 (2300-2400MHz)	1.7
TDD_B41 (2496-2690MHz)	1.7
FDD_B1 (1920-1980MHz)	1.5
FDD_B2 (1850-1910MHz)	1.2
FDD_B3 (1710-1785MHz)	0.8

Band	Gain
FDD_B4 (1710-1755MHz)	-3.6
FDD_B5 (824-849MHz)	-1.6
FDD_B7 (2500-2570MHz)	1.8
FDD_B8 (880-915MHz)	-1.4
FDD_B20 (832-862MHz)	-1.5
FDD_B28 (703-748MHz)	-3.6
FDD_B12 (699-716MHz)	-3.2

Band	Gain
WCDMA_B1 (1920-1980MHz)	1.5
WCDMA_B8 (880-915MHz)	-1.4
WCDMA_B2 (1850-1910MHz)	1.2
WCDMA_B5 (824-849MHz)	-1.6
GSM850 (824-849MHz)	-1.6
GSM900 (880-915MHz)	-1.4
DCS1800 (1710-1785MHz)	0.8
PCS1900 (1850-1910MHz)	1.2

Band	Gain
GPS 1747.42MHz	1.5
2.4WIFI (2400-2500MHz)	2.1
5GWIFI (5150-5850MHz)	2.7
BT (2400-2500MHz)	2.1
NFC (13.56MHz)	0

We, Shenzhen Tianlong Century TechnologyDevelopment Co.,Ltd., states that All measurements were performed radiated for NFC and therefore additional antenna gain documentation is not required.

Antenna efficiency

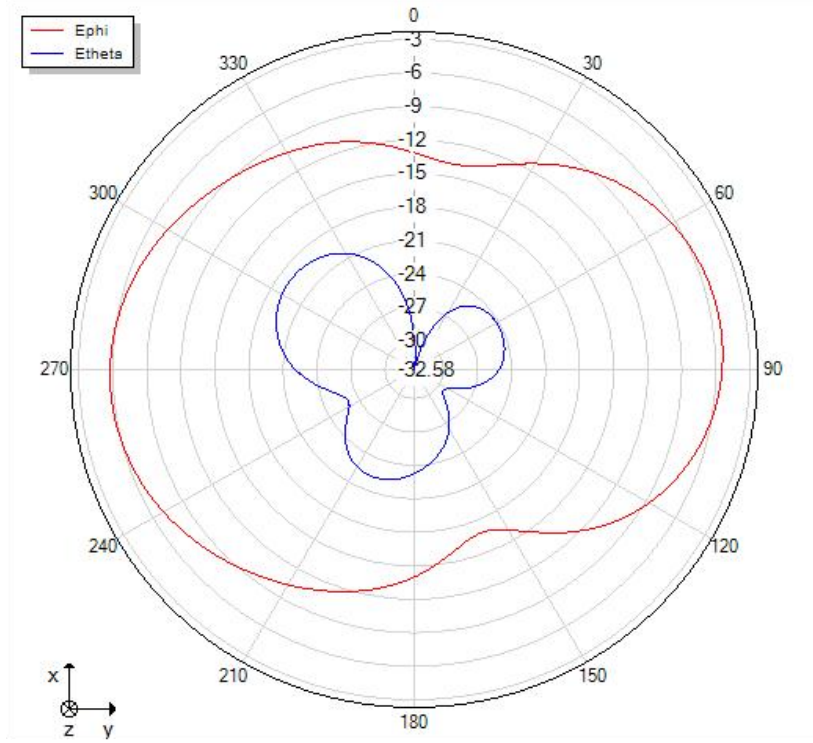
main

Band	efficiency	Band	efficiency	Band	efficiency
TDD_B3_4	42%	FDD_B4	47%	WCDMA_B1	45%
TDD_B3_8	42%	FDD_B5	42%	WCDMA_B8	44%
TDD_B3_9	43%	FDD_B7	47%	WCDMA_B2	45%
TDD_B4_0	44%	FDD_B8	44%	WCDMA_B5	42%
TDD_B4_1	41%	FDD_B2_0	45%	GSM850	42%
FDD_B1	42%	FDD_B2_8	20%	GSM900	44%
FDD_B2	43%	FDD_B1_2	25%	DCS1800	45%
FDD_B3	45%	CDMA	46%	PCS1900	43%

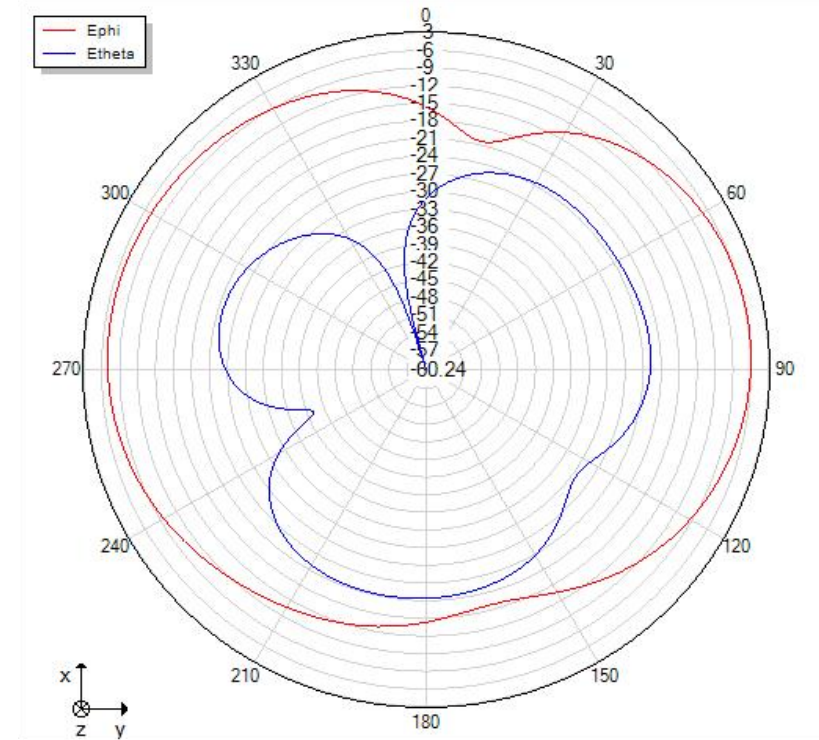
Three in one antenna

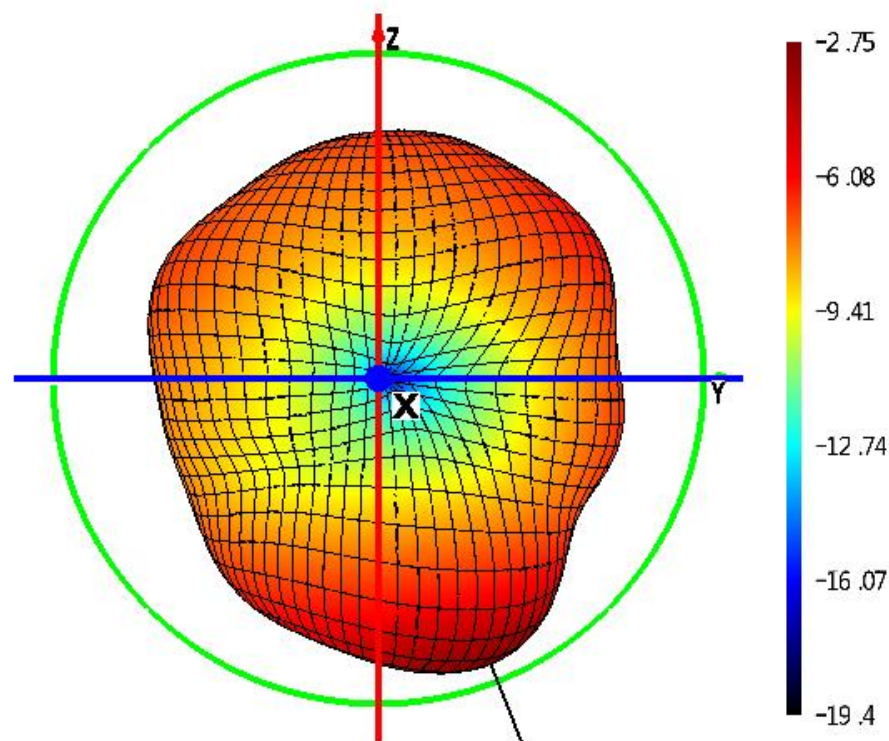
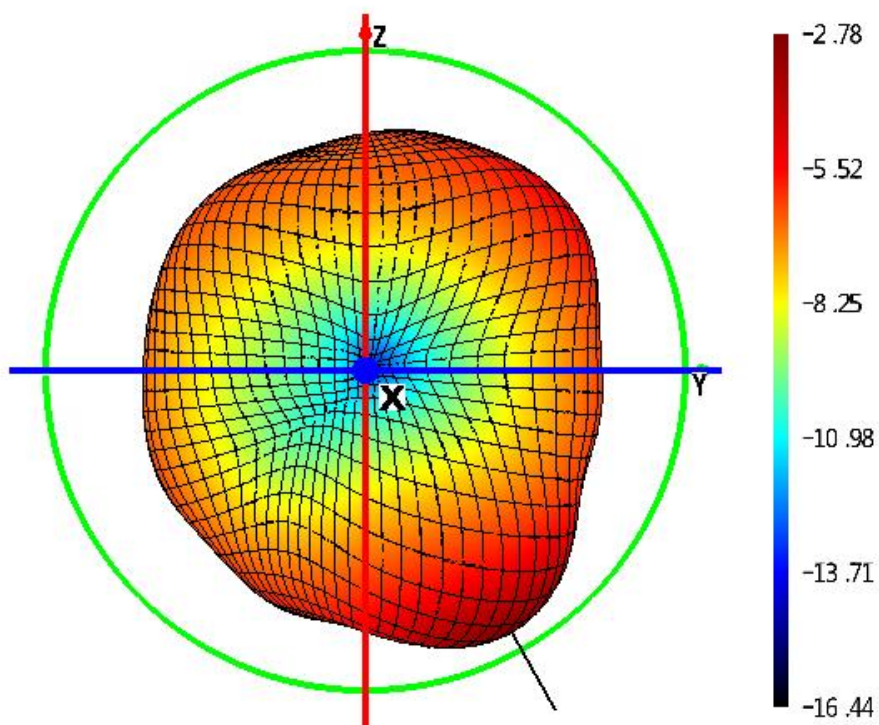
Band	efficiency
GPS	35%
2.4WIFI	41%
5GWIFI	34%
BT	41%

Theta=90 freq=700MHz

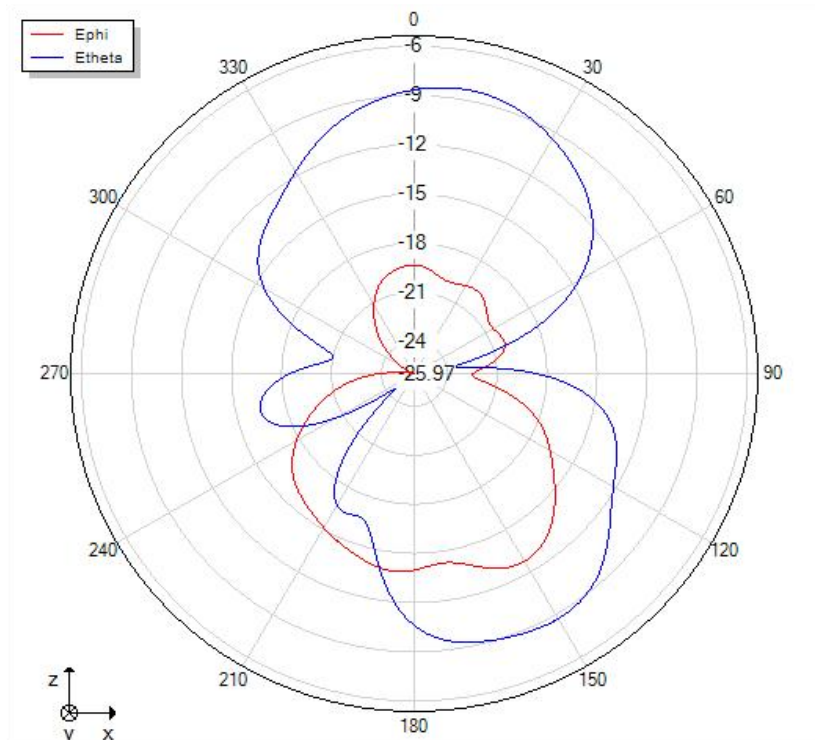


Theta=90 freq=760MHz

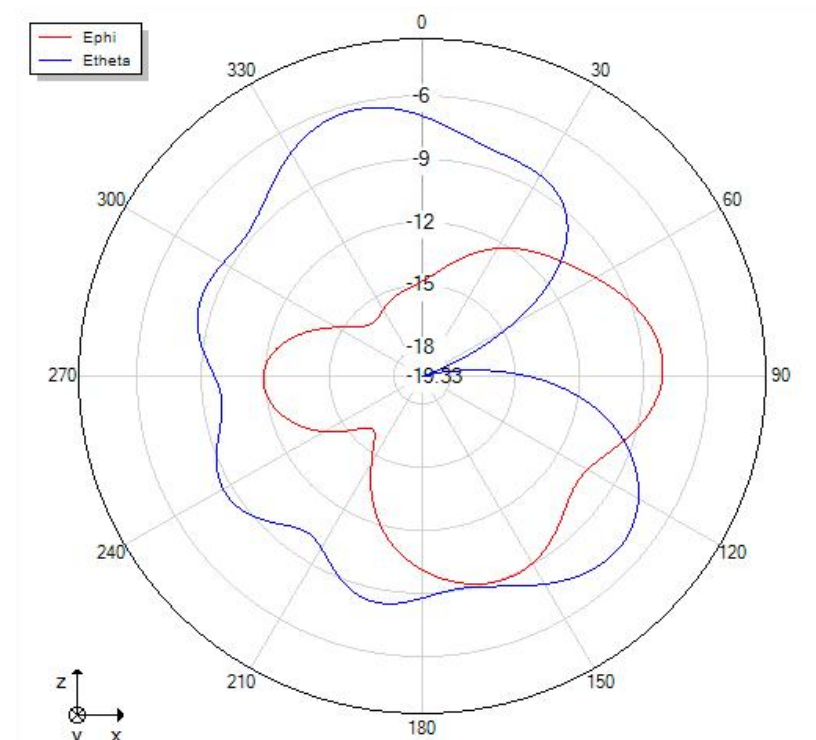


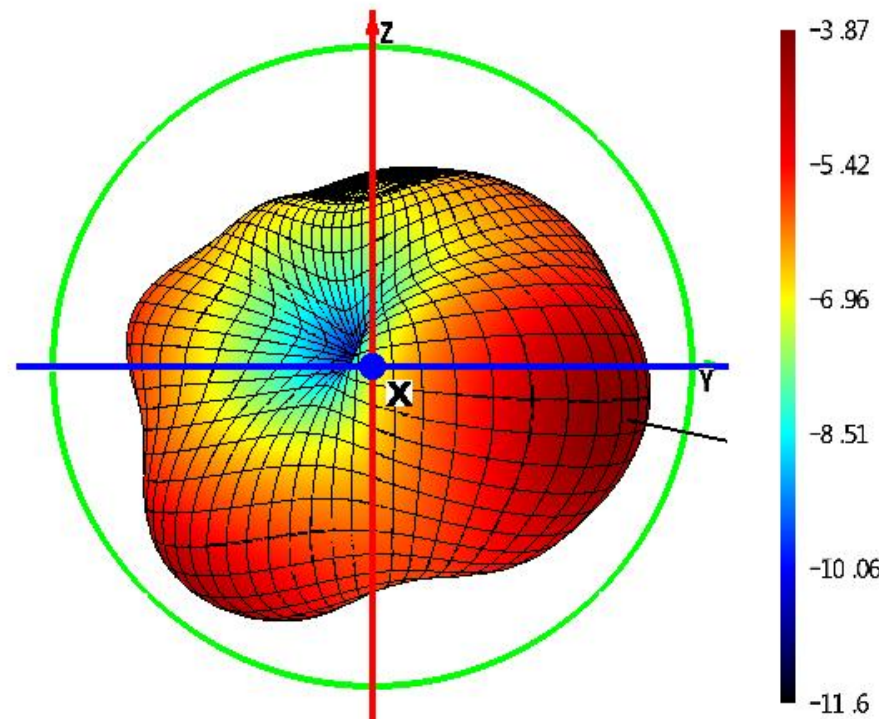
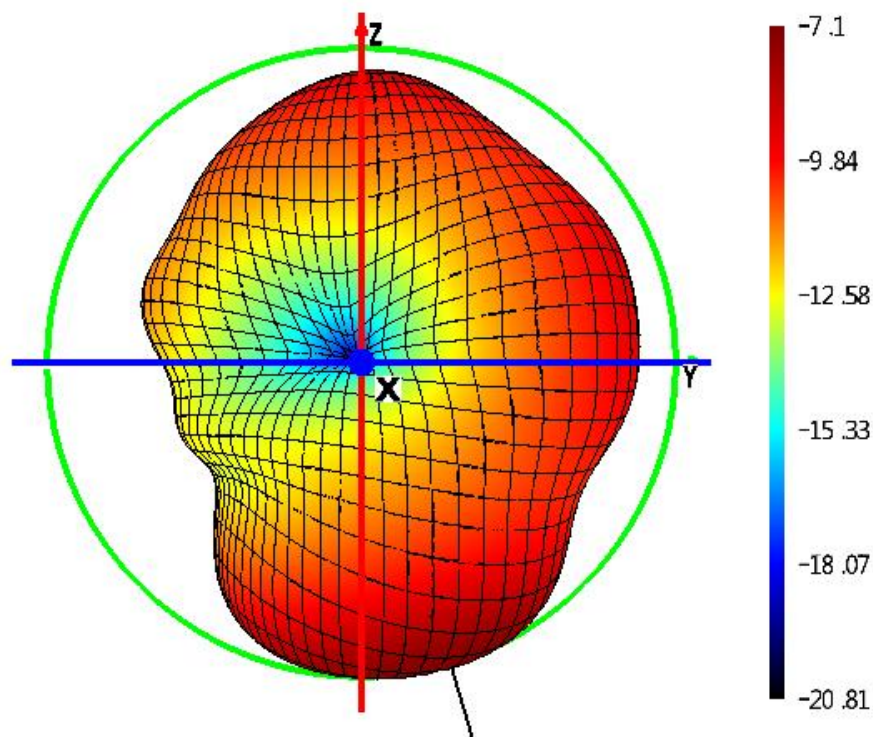


Phi=0 freq=800MHz

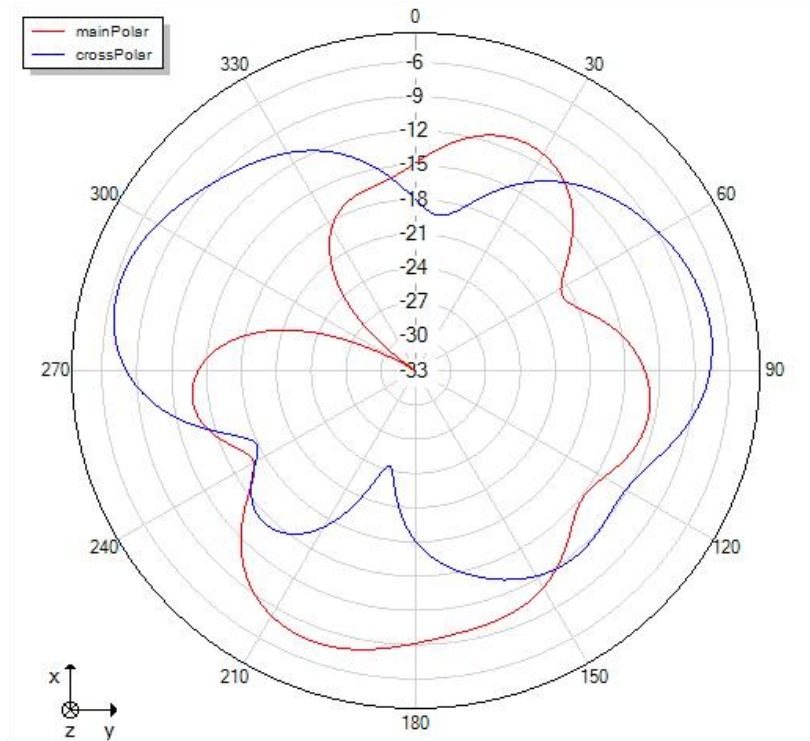


Phi=0 freq=850MHz

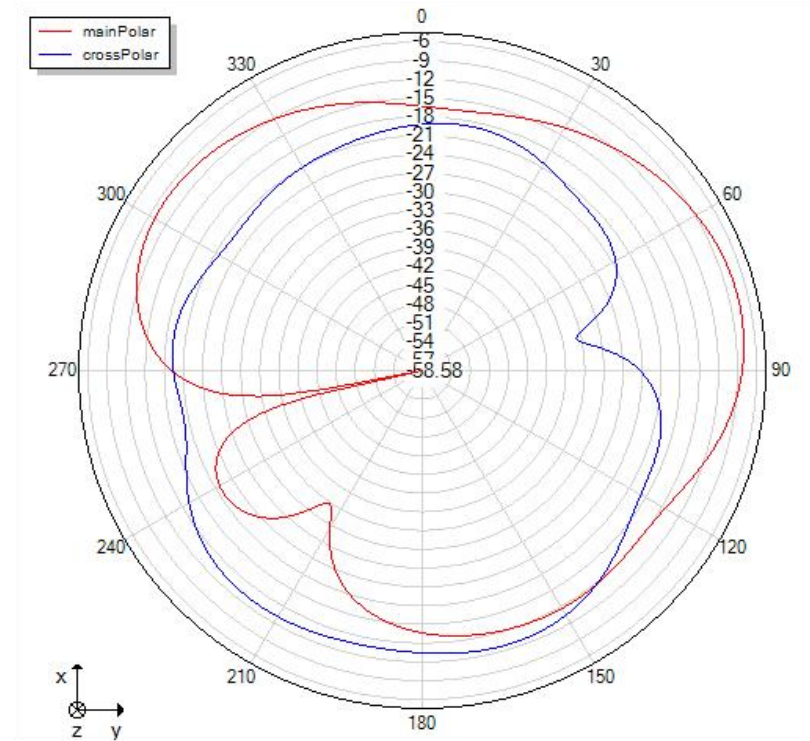


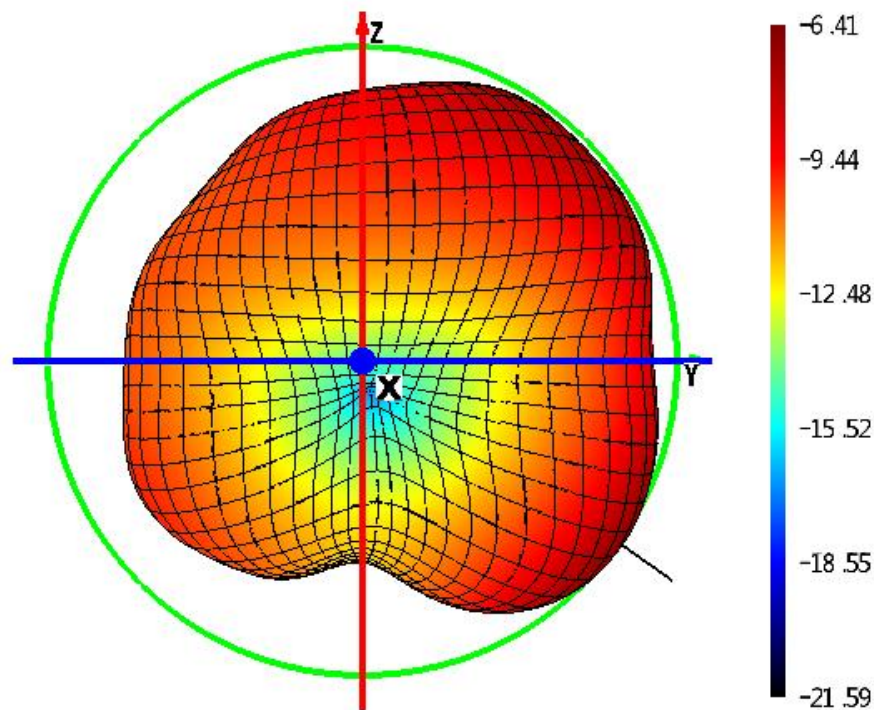
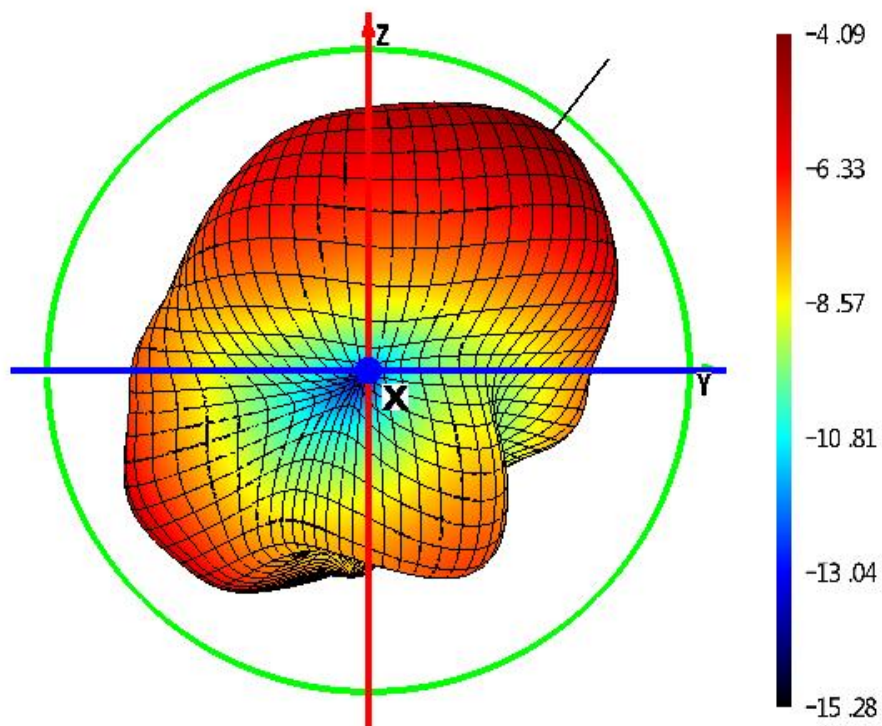


Theta=90 freq=900MHz

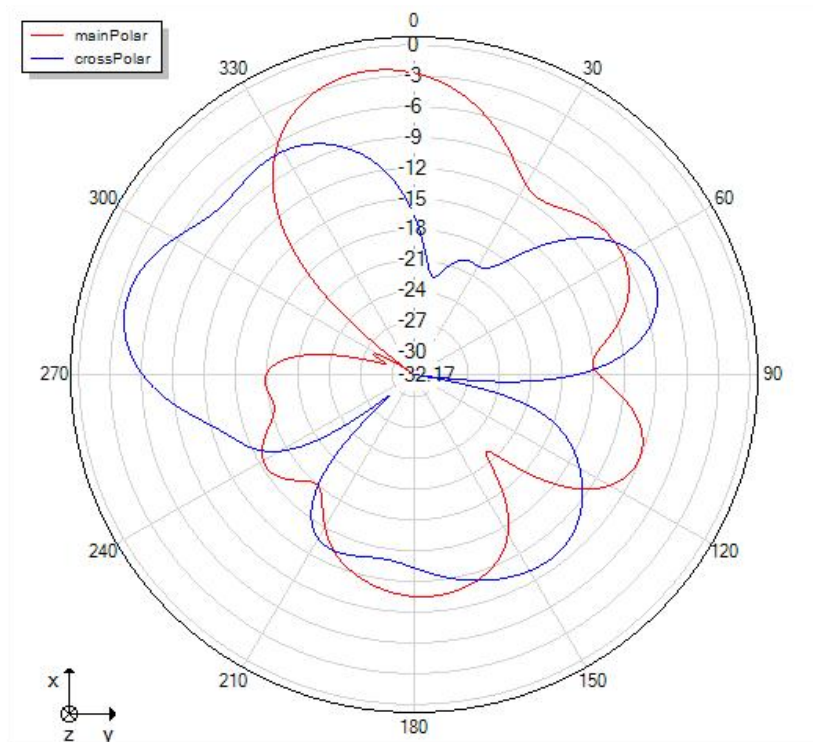


Theta=90 freq=980MHz

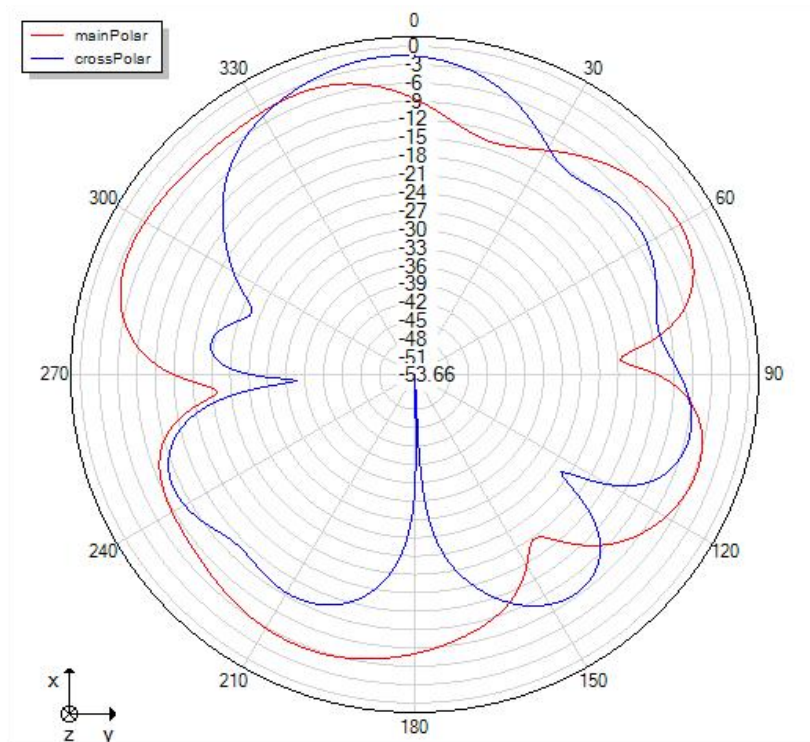


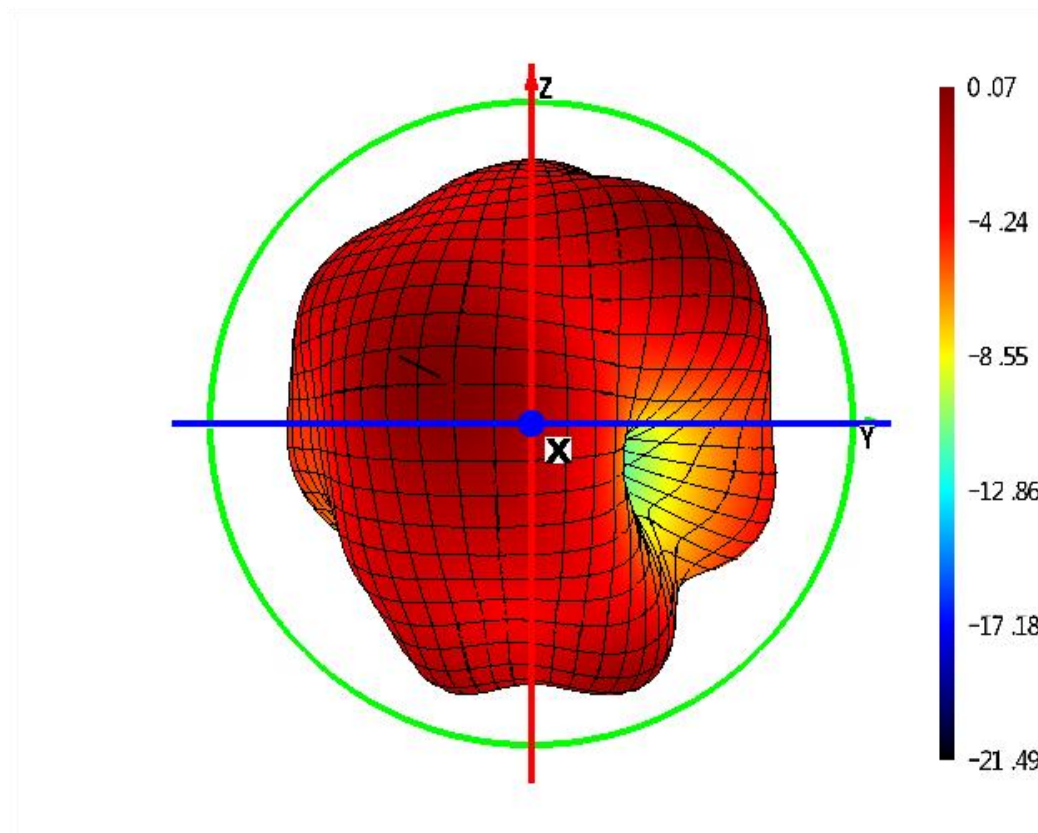
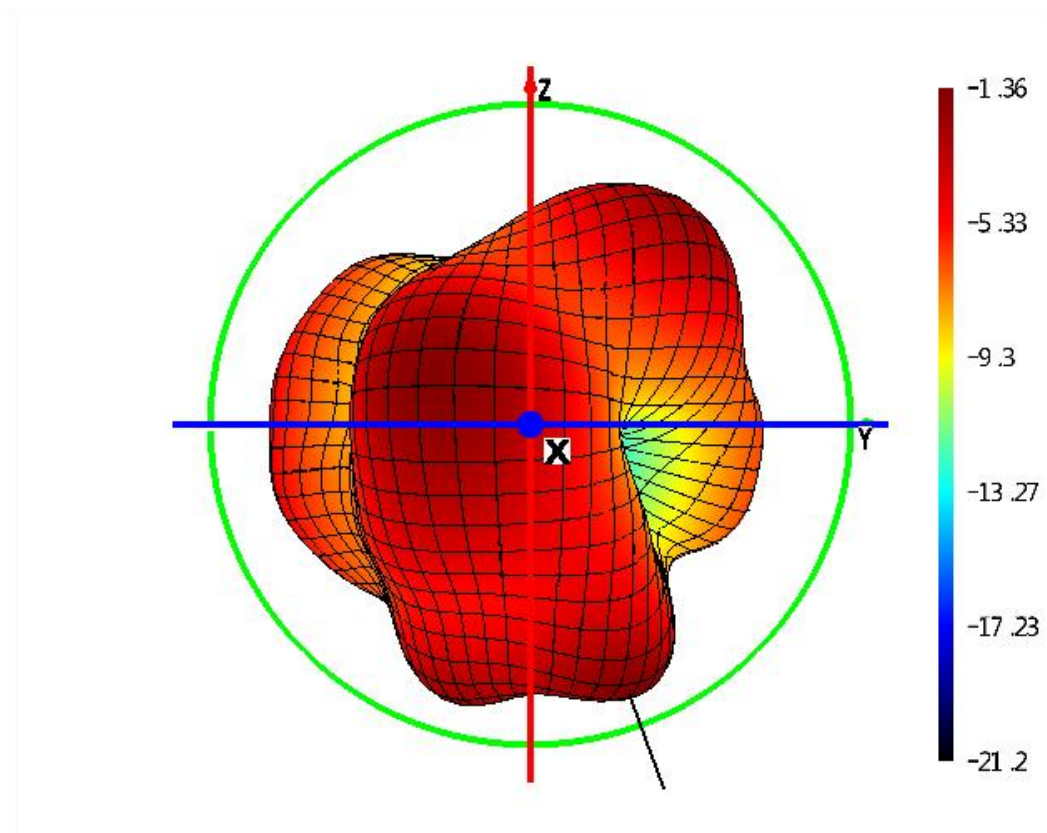


Theta=90 freq=1700MHz

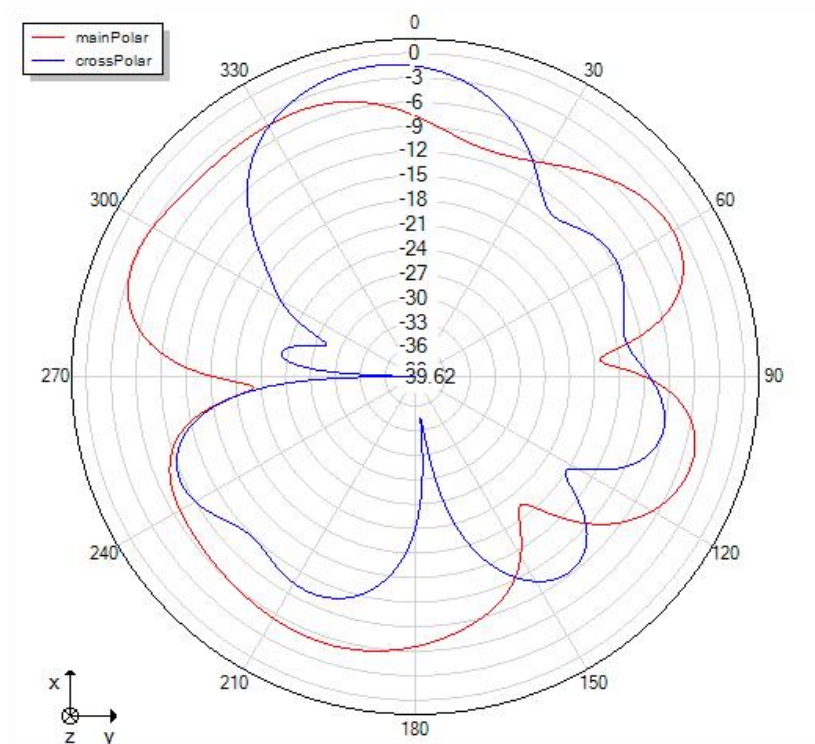


Theta=90 freq=1860MHz

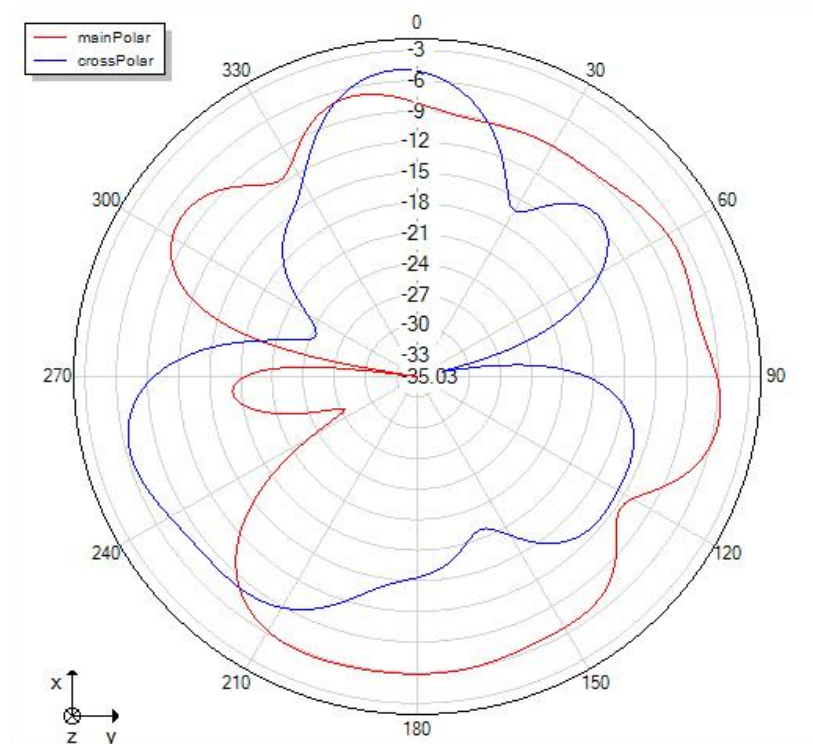


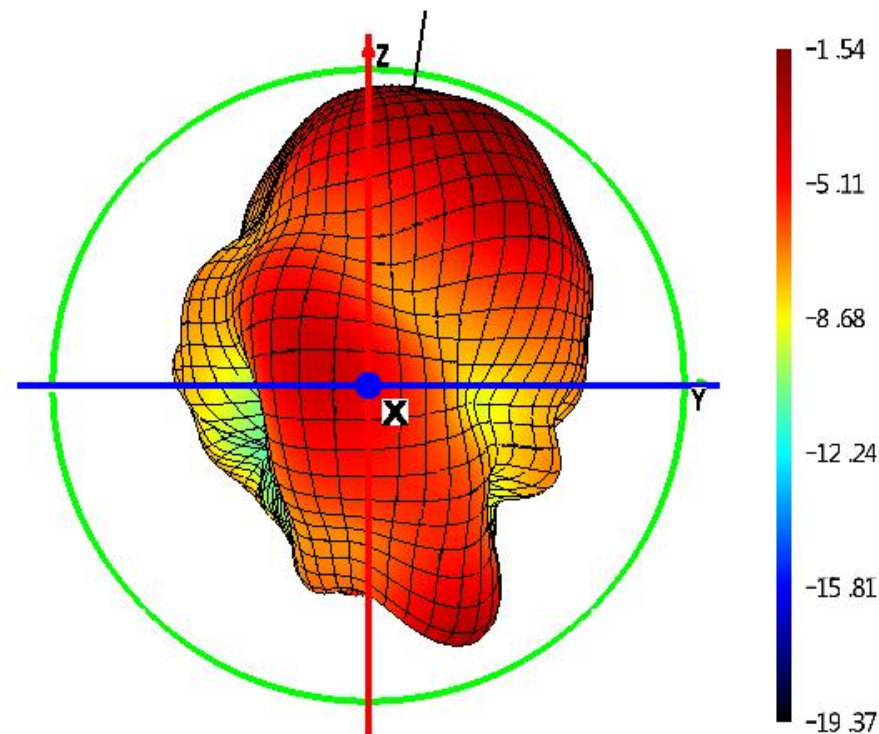
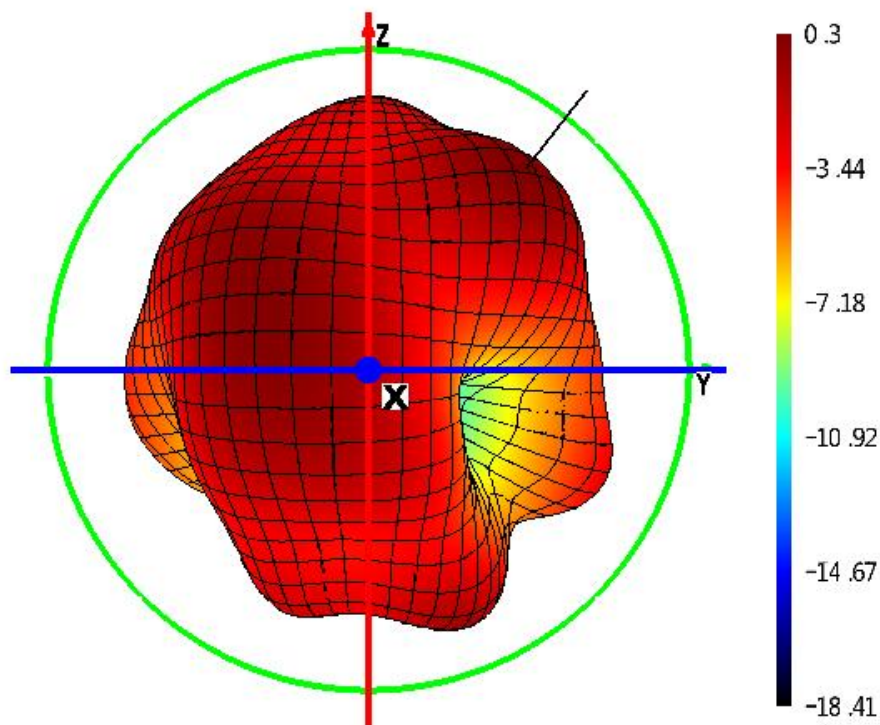


Theta=90 freq=1900MHz

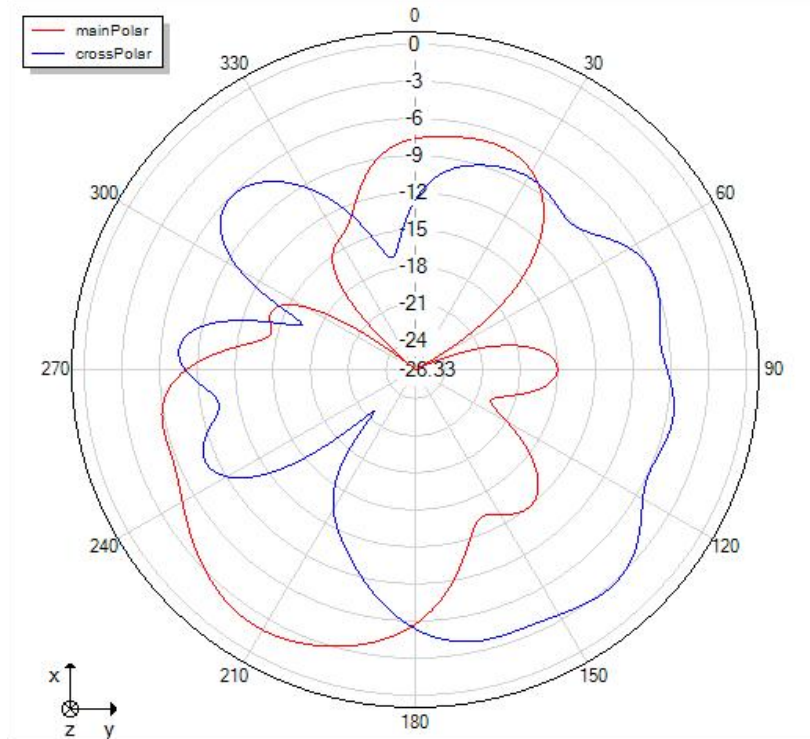


Theta=90 freq=2100MHz

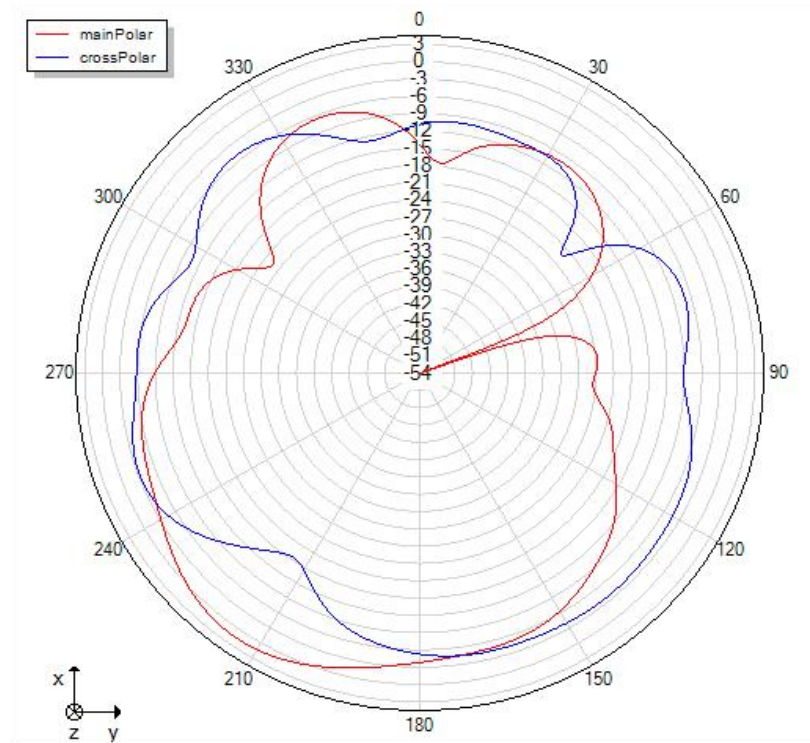


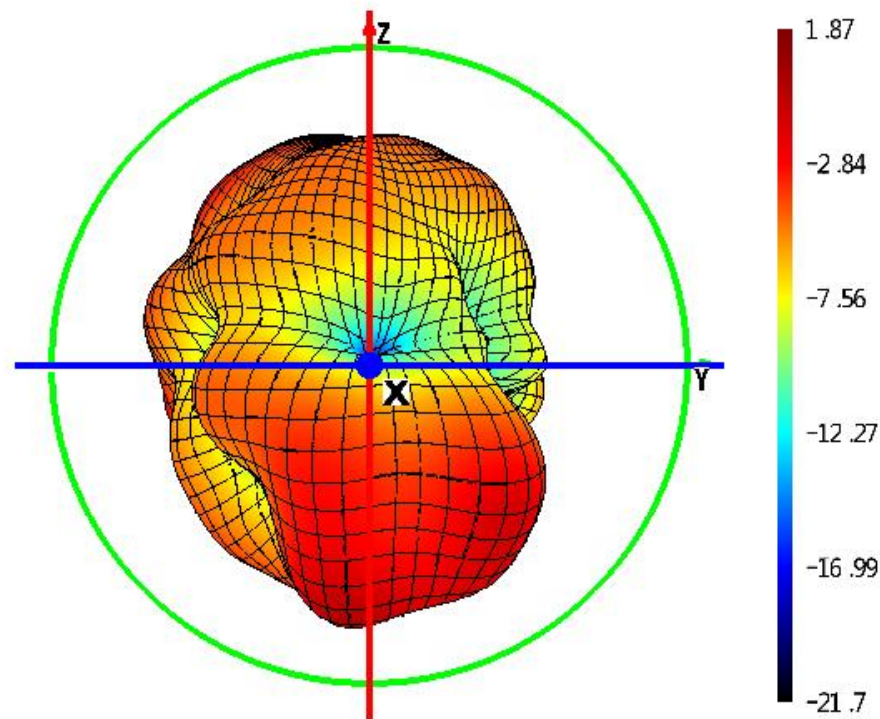
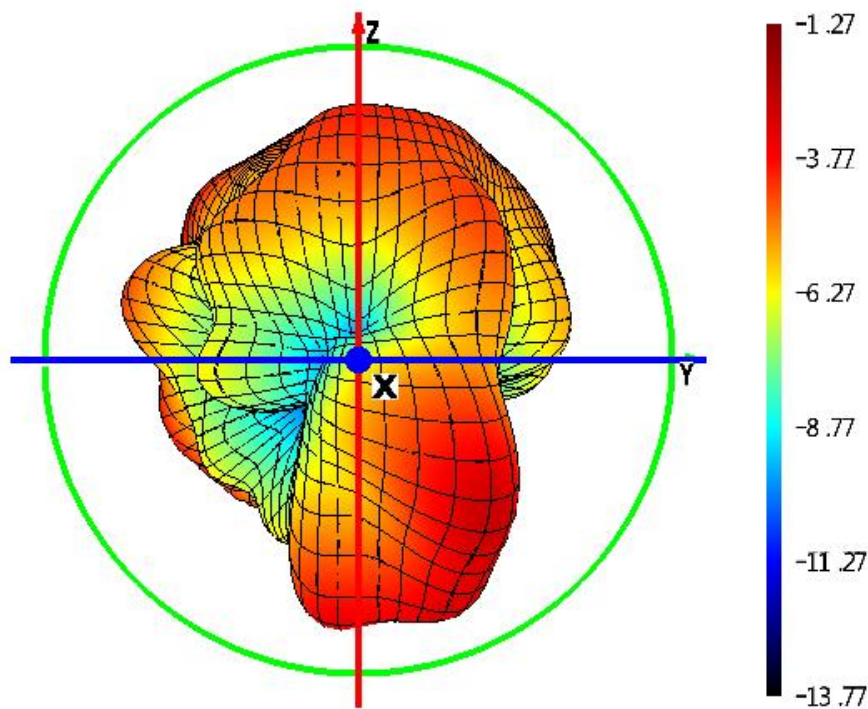


Theta=90 freq=2300MHz

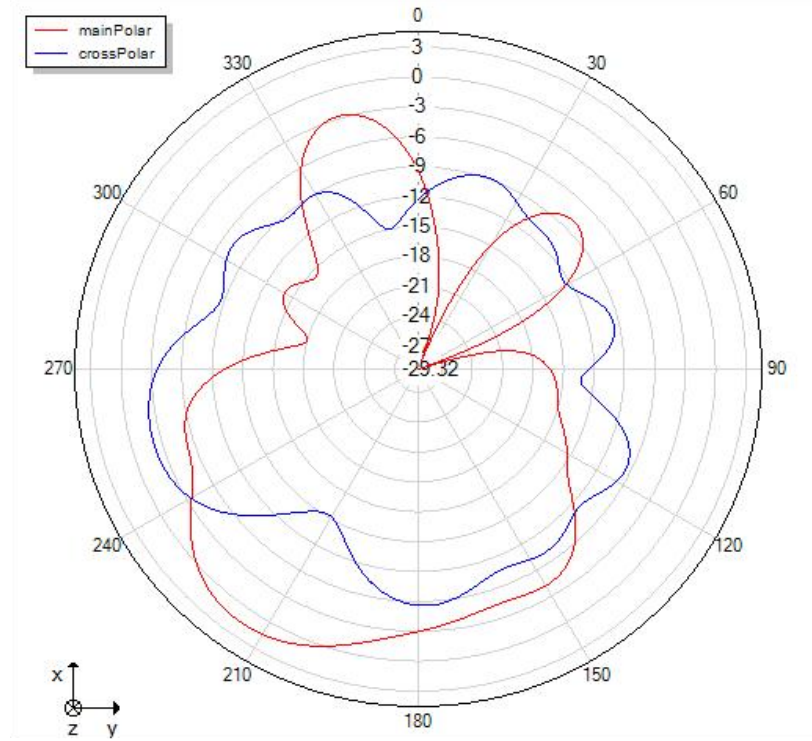


Theta=90 freq=2400MHz

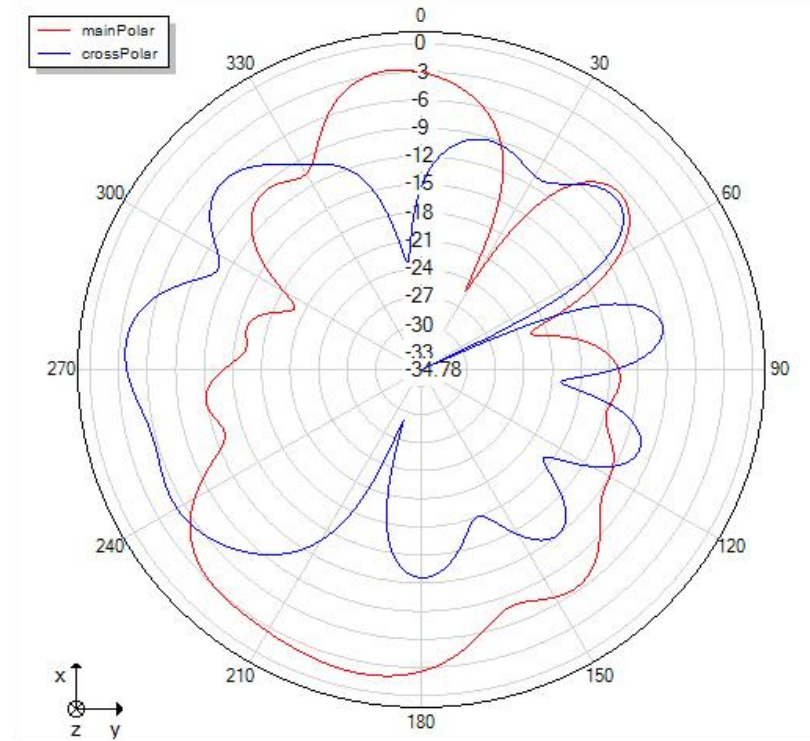


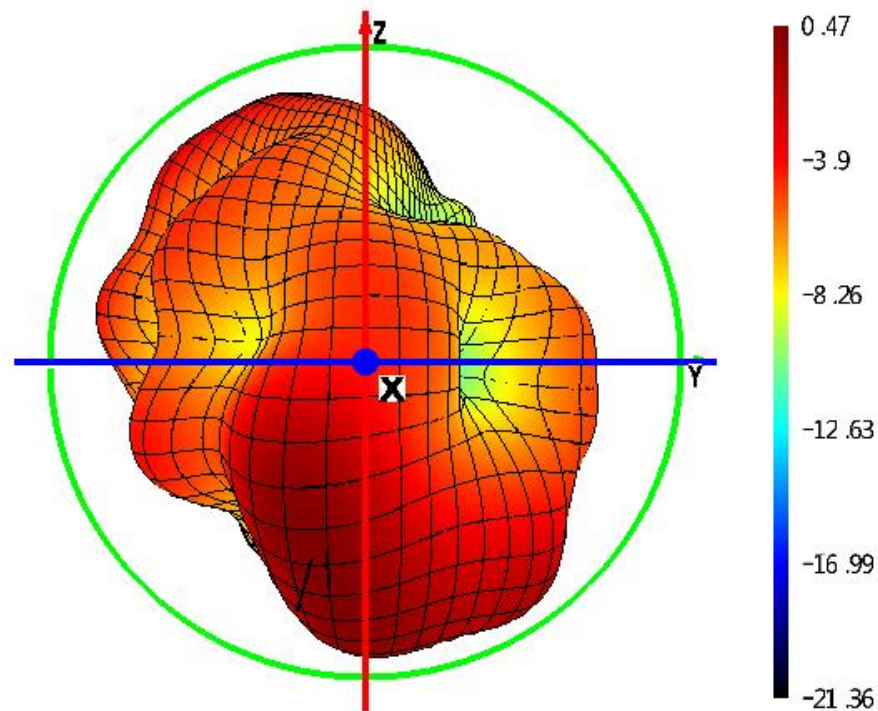
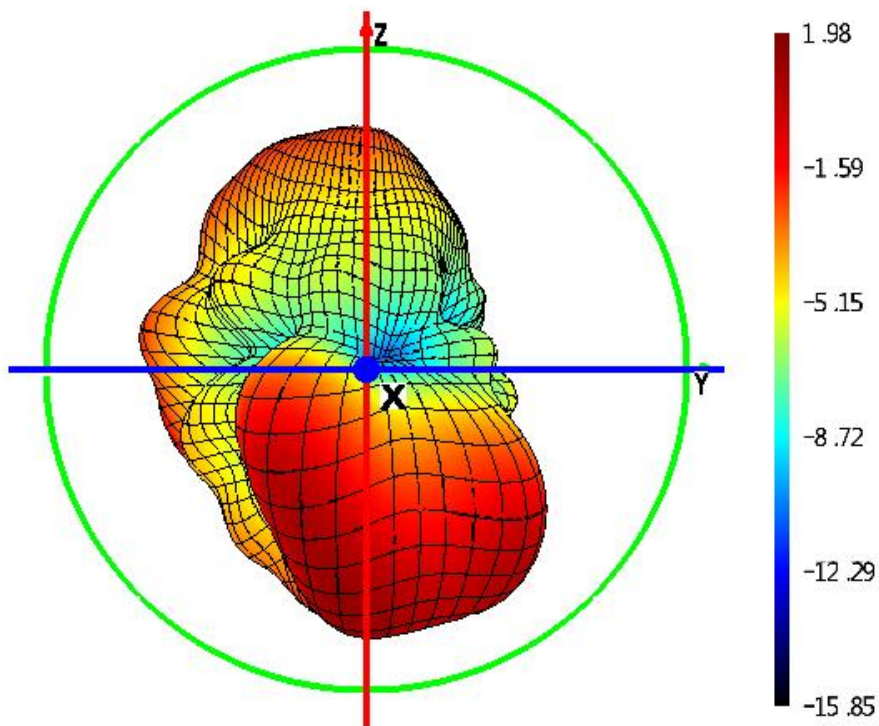


Theta=90 freq=2500MHz

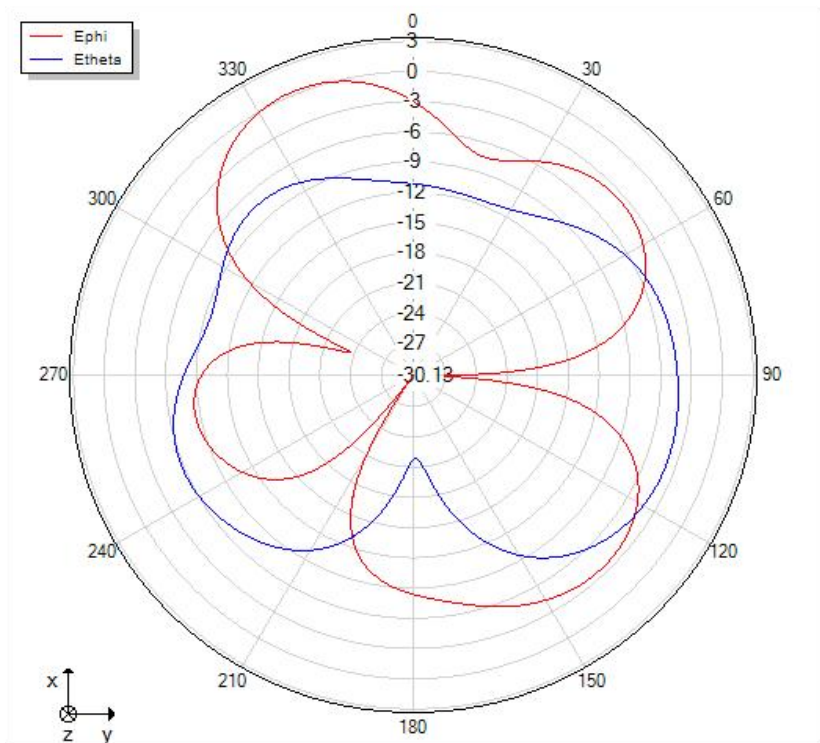


Theta=90 freq=2700MHz

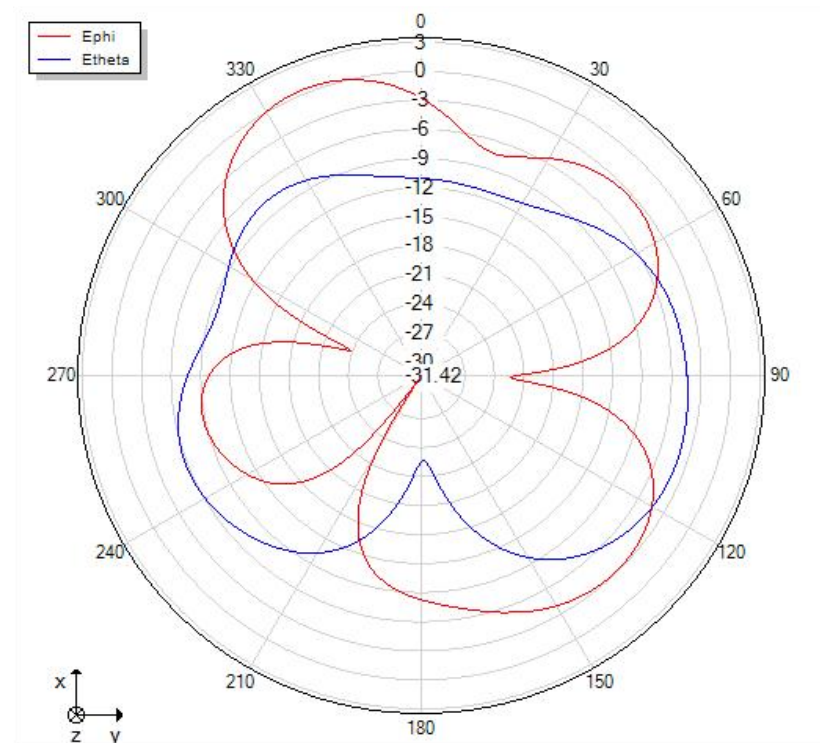


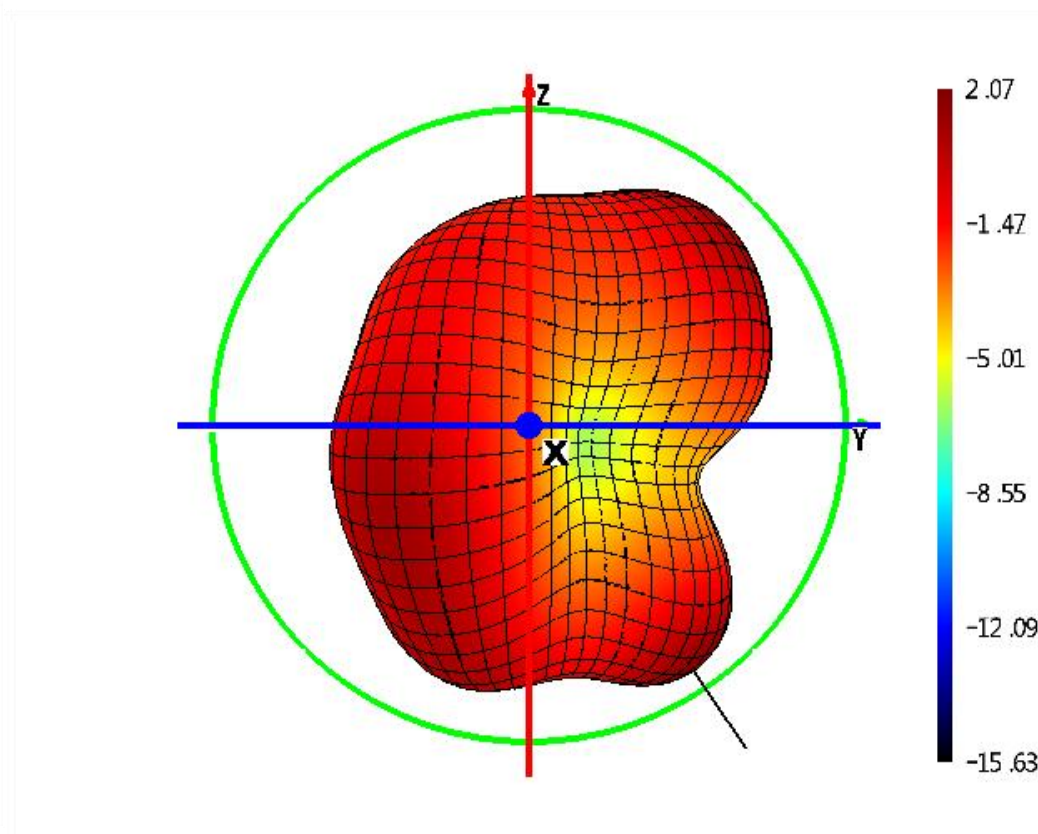
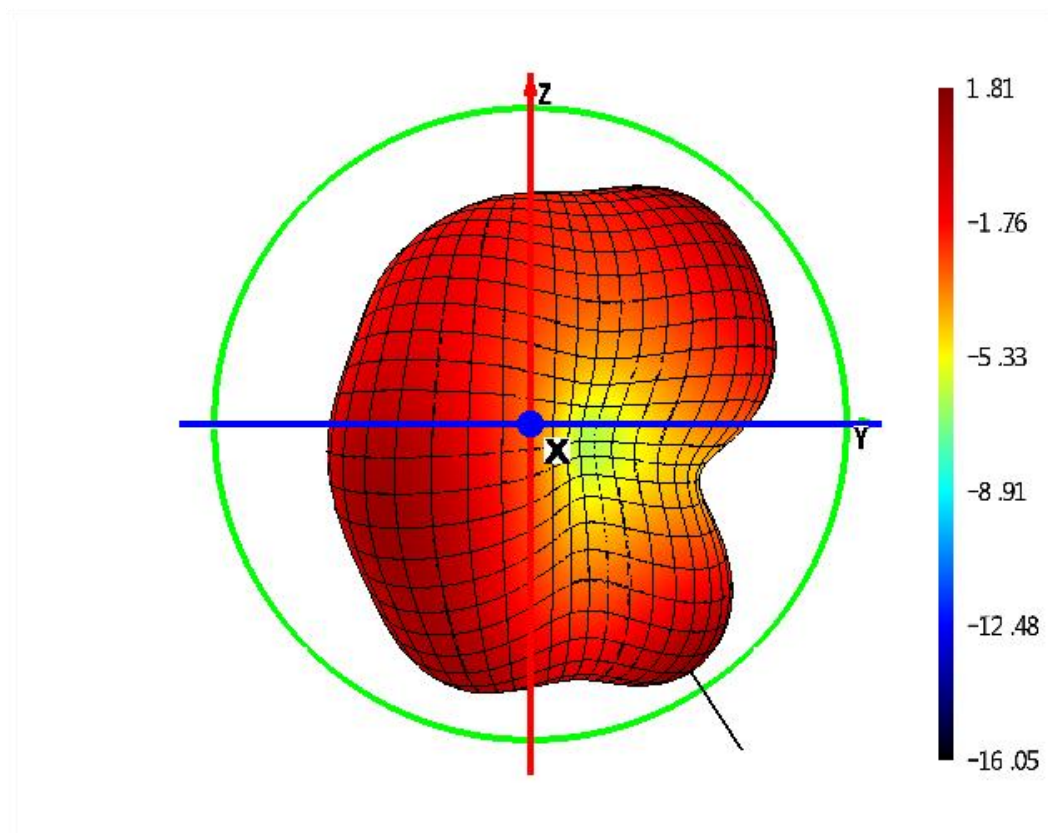


Theta=90 freq=1570MHz

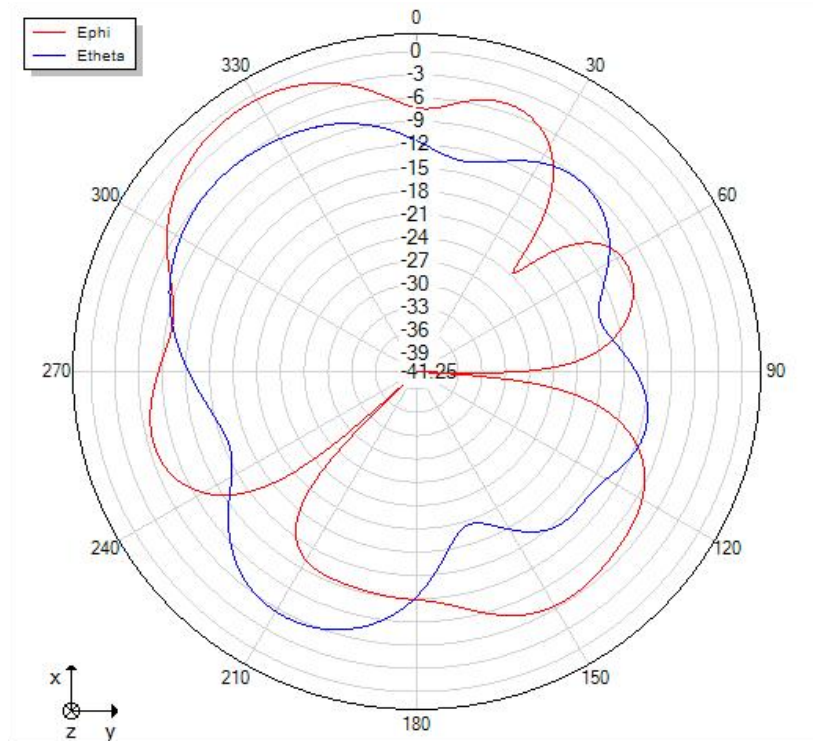


Theta=90 freq=1575MHz

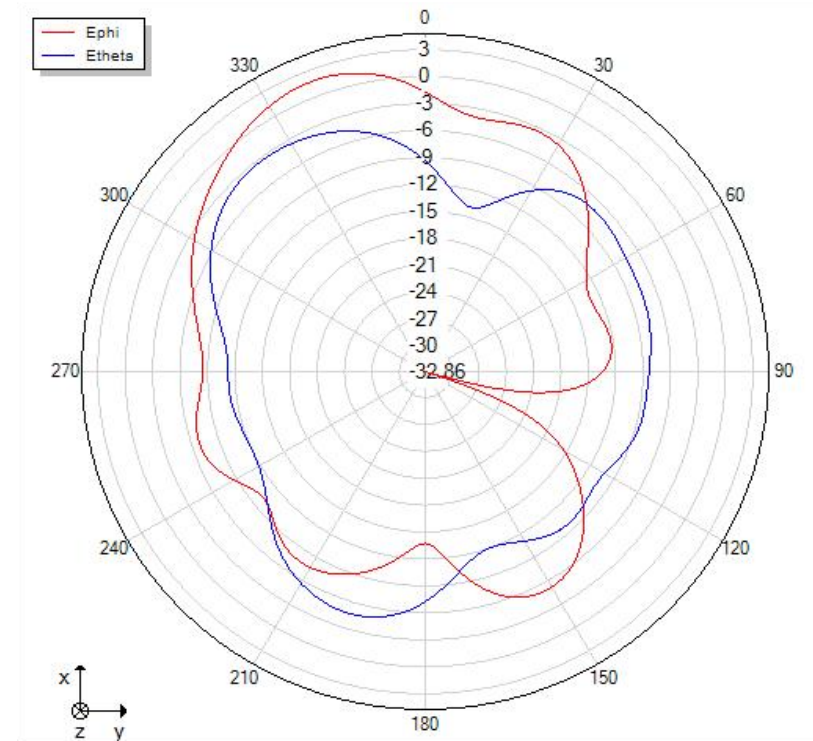


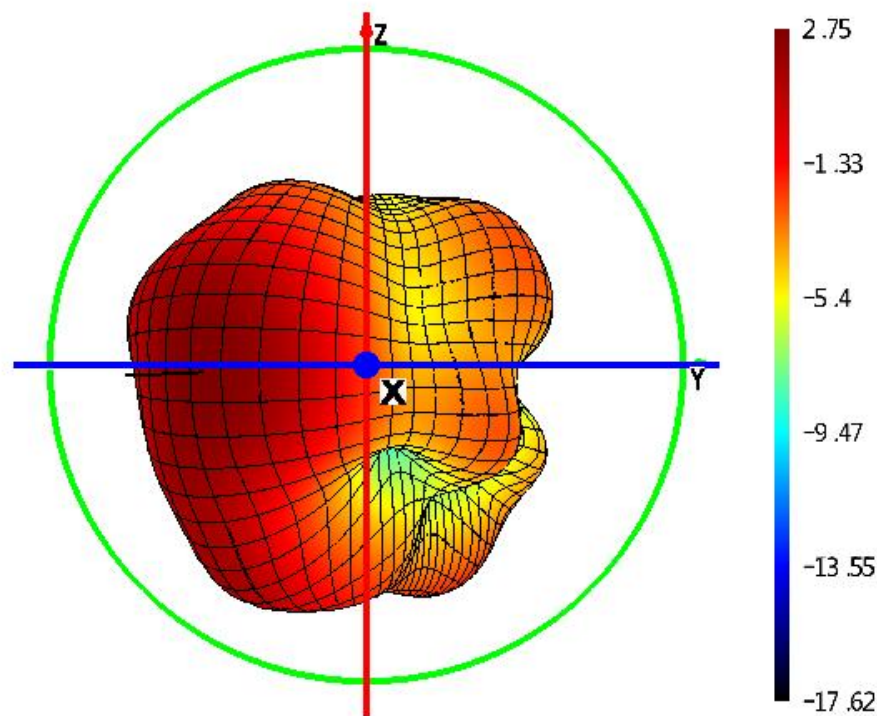
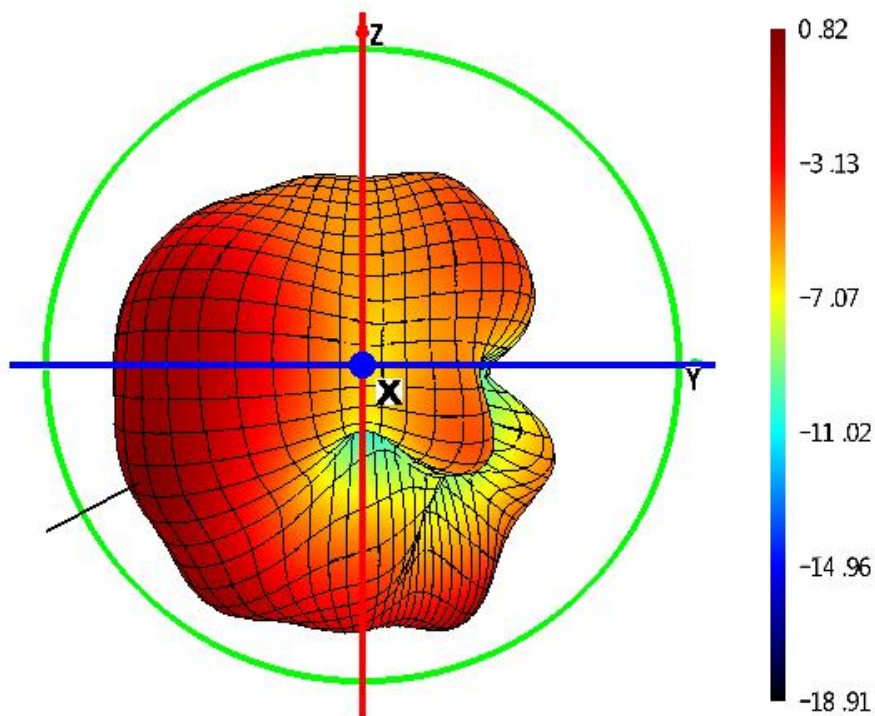


Theta=90 freq=2400MHz

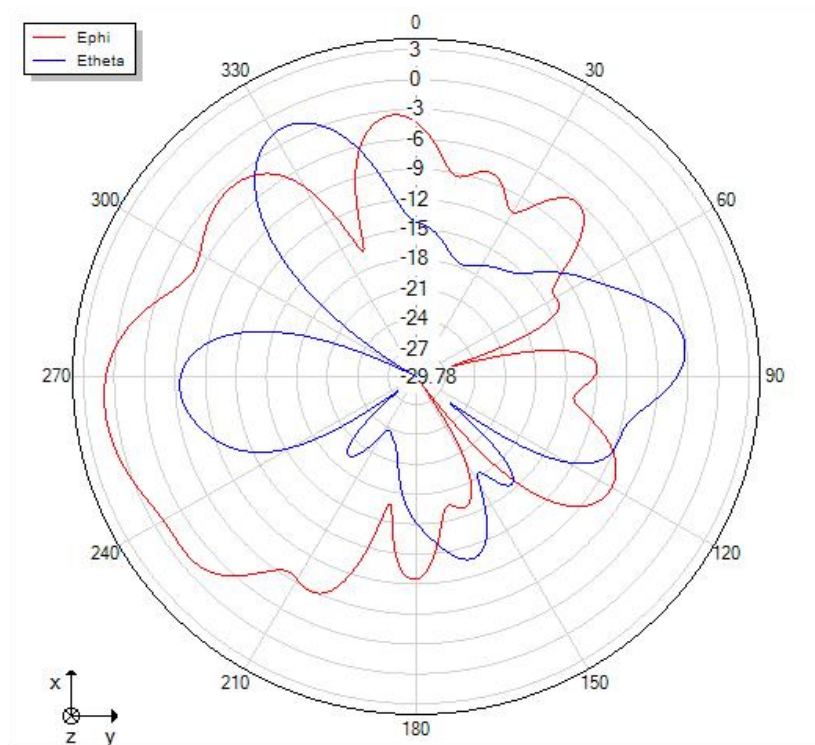


Theta=90 freq=2500MHz

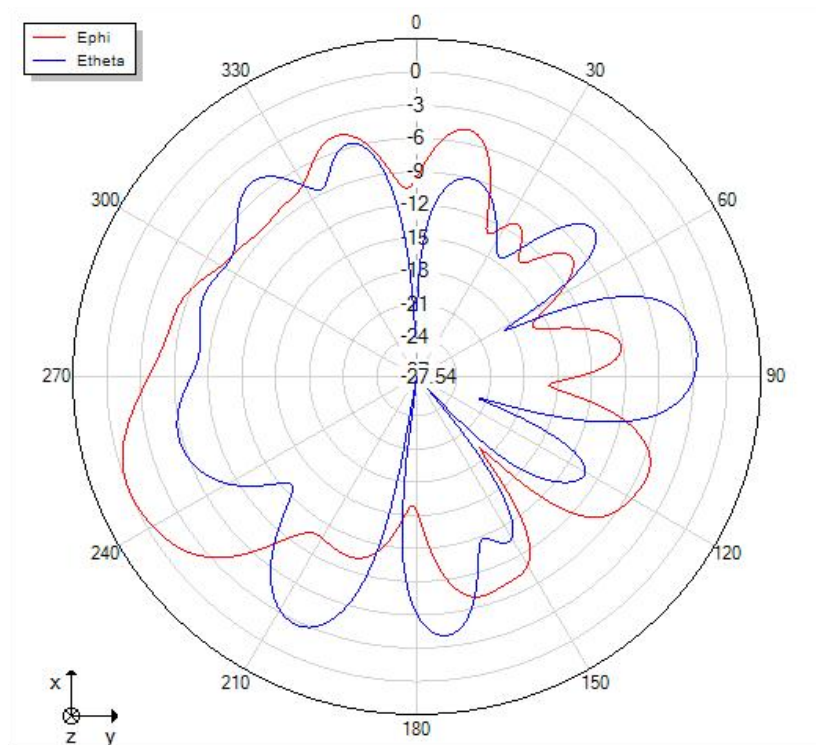


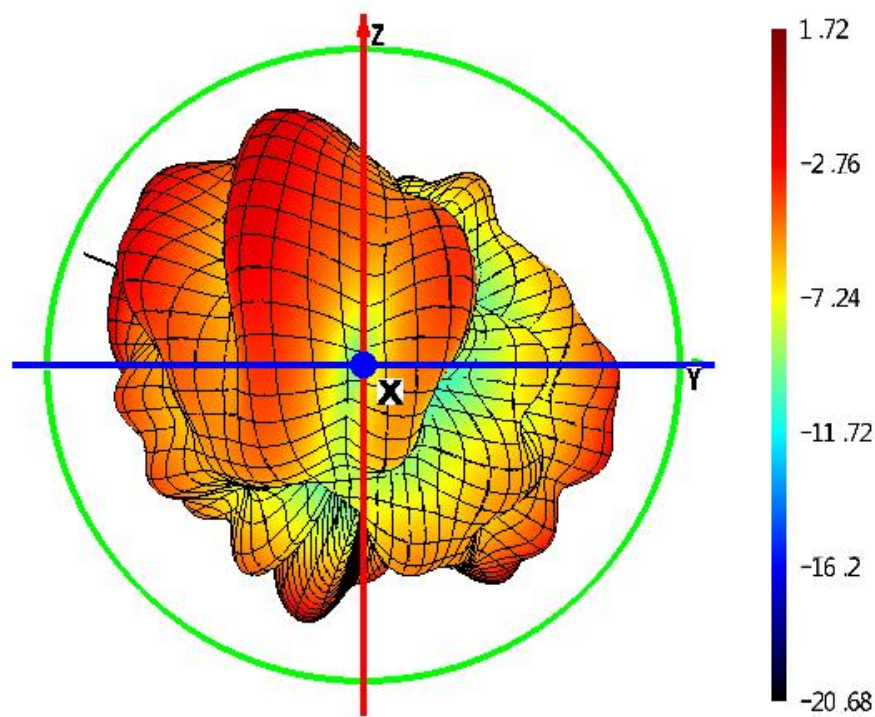
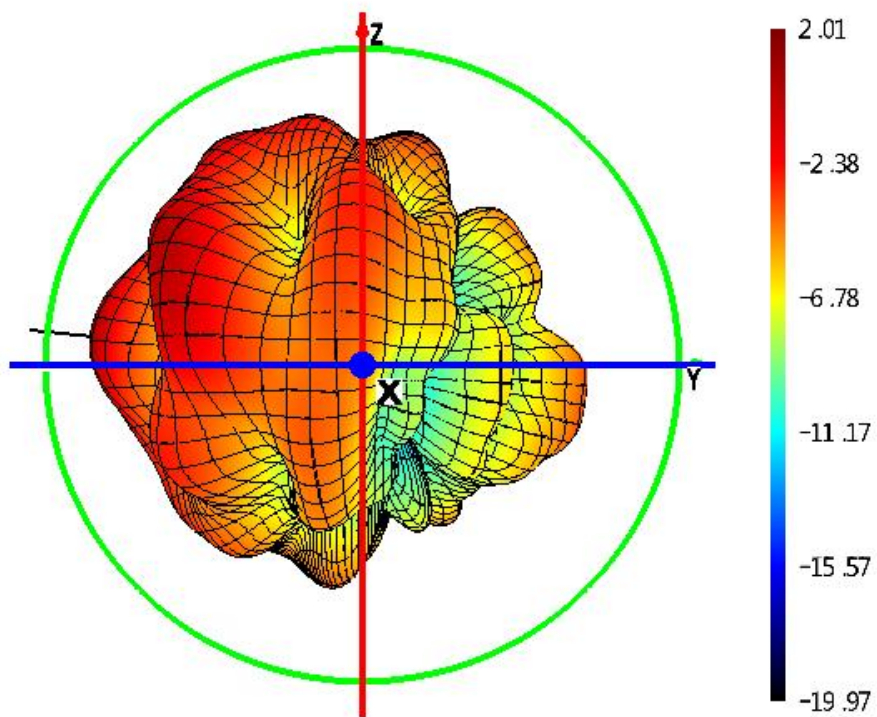


Theta=90 freq=5100MHz



Theta=90 freq=5800MHz



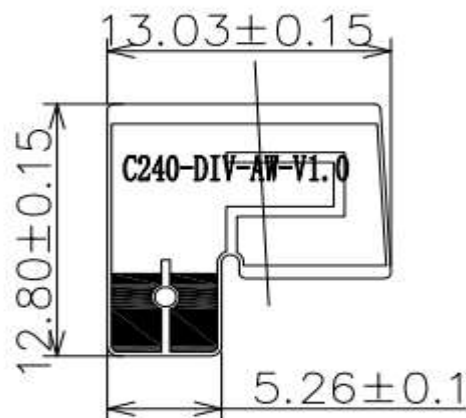




Antenna drawing



丝印黑色亮光字码



半对半材料

C240.10011002

技术要求:

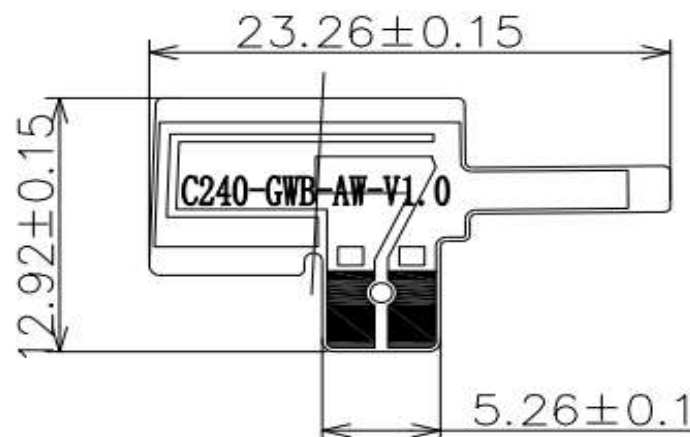
- 1、绿色为外形轮廓,白色填充部位为电气走线覆铜;
- 2、基材材质为聚酰亚胺或聚酯薄膜;
- 3、图示为正面,反面背胶,此FPC背胶3M300LSE(9471LE);
- 4、打*为必测尺寸及重点尺寸,铜箔线路所有尺寸公差不得超过 ± 0.05 ,
模具冲出外型尺寸公差不得超过 ± 0.1 ,未注尺寸以图形为准;
- 5、基材 $25\mu m$,铜箔 $18\mu m$,镀镍 $1.5\sim 5.0\mu m$;镀金 $0.025\sim 0.075\mu m$;
走线面除焊盘外其它区域表面亚光黑色;
- 6、可靠性测试:盐水喷雾试验48H\橡皮摩擦测试(100个循环)\耐醇性测试(50个循环)\
恒温恒湿试验\冷热冲击试验(12个循环)\附着力测试\金手指引脚处挠折性测试;
- 7、出现下列问题均视为不合格:起泡分层\露铜\折皱、折痕\边缘毛边\字符不清;
- 8、包装应防湿、防潮、表面干净,完好无破损。

深圳市安威无线科技有限公司

第三视角				项目名称	C240	日期	2022-11-18			
0~10	± 0.05	$\oplus$	0.03	产品名称	GSM天线	设计				
10~30	± 0.10	$\bigcirc$	0.03	产品料号	AW006-C240-021-A0	审核	MD	QYL		
30~50	± 0.15	$\odot$	$\phi 0.02$	材质	FPC	批准	RF	XL		
50~80	± 0.20	$\perp$	0.02			单位	mm	比例	FIT	版本
角度	$\pm 1^\circ$	$\angle$	0.05							A1
第1页,共1页										



丝印黑色亮光字码



C240.10011001

技术要求:

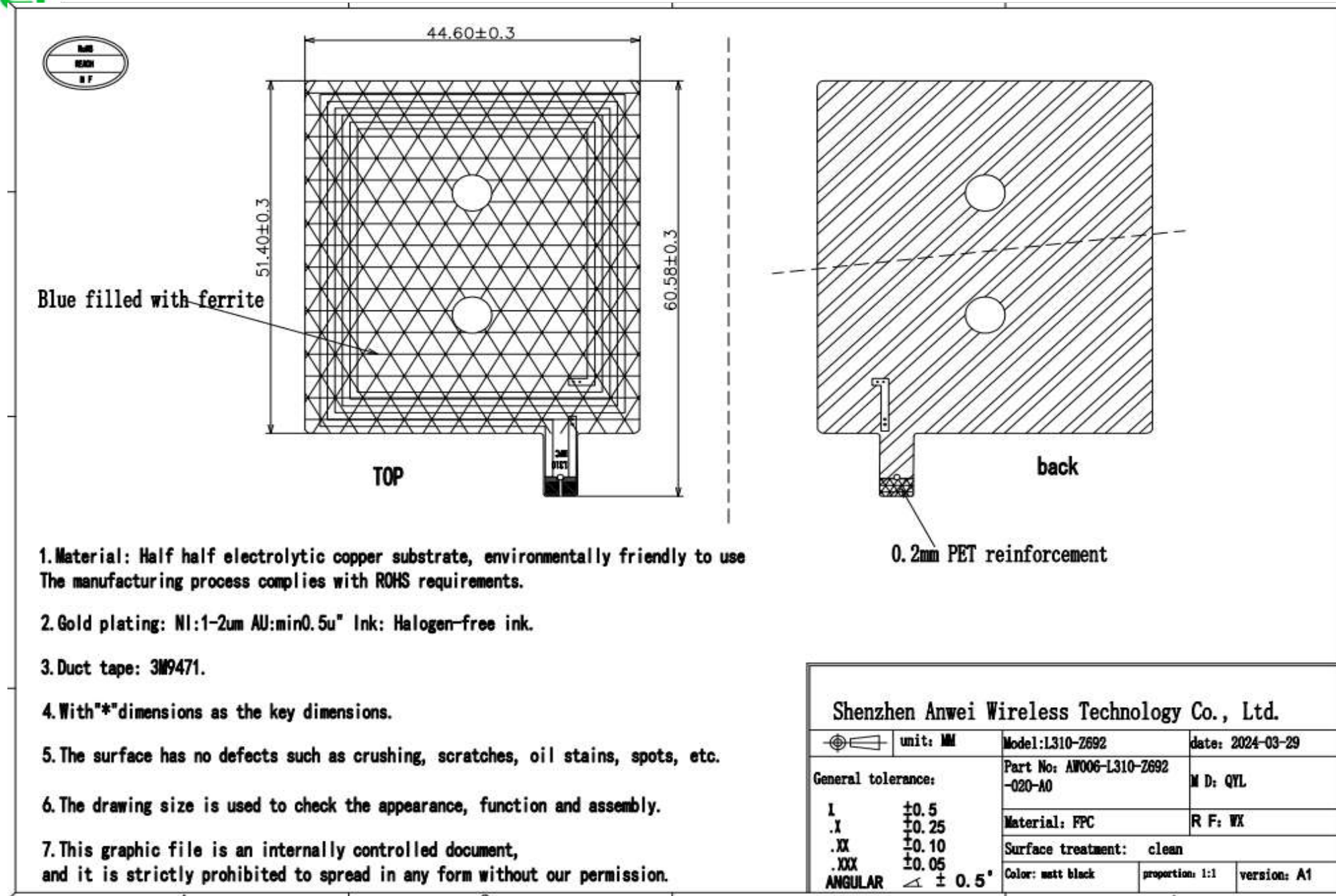
半对半材料

- 1、绿色为外形轮廓,白色填充部位为电气走线覆铜;
- 2、基材材质为聚酰亚胺或聚酯薄膜;
- 3、图示为正面,反面背胶,此FPC背胶3M300LSE(9471LE);
- 4、打*为必测尺寸及重点尺寸,铜箔线路所有尺寸公差不得超过 ± 0.05 ,
模具冲出外型尺寸公差不得超过 ± 0.1 ,未注尺寸以图形为准;
- 5、基材 $25\mu m$,铜箔 $18\mu m$,镀镍 $1.5\sim 5.0\mu m$;镀金 $0.025\sim 0.075\mu m$;
走线面除焊盘外其它区域表面亚光黑色;
- 6、可靠性测试:盐水喷雾试验48H\橡皮摩擦测试(100个循环)\耐醇性测试(50个循环)\
恒温恒湿试验\冷热冲击试验(12个循环)\附着力测试\金手指引脚处挠折性测试;
- 7、出现下列问题均视为不合格:起泡分层\露铜\折皱、折痕\边缘毛边\字符不清;
- 8、包装应防湿、防潮、表面干净,完好无破损。

深圳市安威无线科技有限公司

第三视角				项目名称	C240	日期	2022-11-18			
0~10	± 0.05	$\oplus$	0.03	产品名称	GSM天线	设计				
10~30	± 0.10	$\bigcirc$	0.03	产品料号	AW006-C240-021-A0	审核	MD	QYL		
30~50	± 0.15	$\odot$	$\phi 0.02$	材质	FPC	批准	RF	XL		
50~80	± 0.20	$\perp$	0.02			单位	mm	比例	FIT	版本
角度	$\pm 1^\circ$	$\angle$	0.05							A1
第1页,共1页										

Antenna drawing





深圳市安威无线科技有限公司

行业领先的一站式通信射频天线解决方案制造商

The End

携手共进 共创未来