



ShenZhen Huaxinwei communication technology
Co.,Ltd.

9th Floor, Building C, Zhangge Huilongfengjing, Fucheng Street, Longhua District, Shenzhen, China

Antenna test report

Customer Name: XunRui

Project Name: M8108B

Designer: Zhang Jun

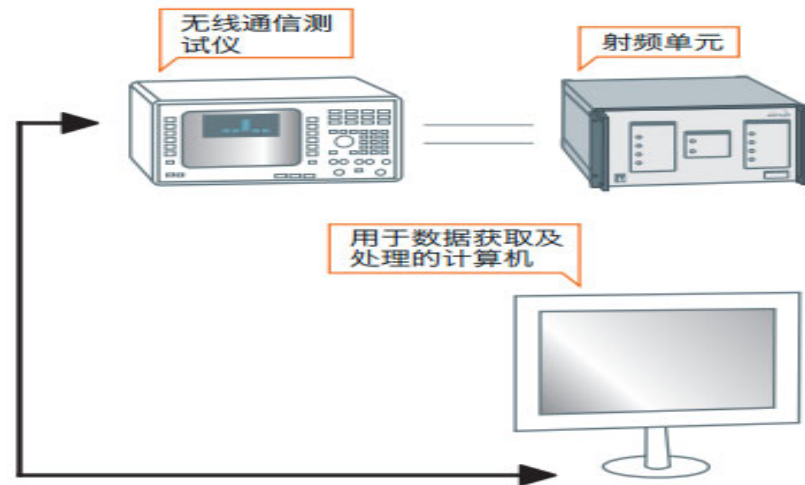
Date: 2025/07/14



The customer name		XunRui	Project Name	M8108A
NO.	project	Detailed above		
1	spectrum	GSM850/900/1800/1900+WCDMA-B1/2/4/5/8+LTE-B1/2/3/4/5/7/8/12/17/20/28/66/40/41+GPS/WIFI/BT		
2	Project type	The mobile phone		
3	Antenna space area			
4	Feed point type			
5	The sensitivity			
6	Type of antenna			
7	The length of the PCB board			
8	note	Debugging prototype		
RF		Zhang Jun	13430515055	hxw_xiaozhang@126.com

1、Test system and test equipment

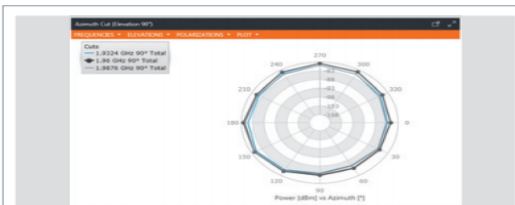
System Brand: MVG(SATIMO) measurement features: gain • pattern beamwidth cross polarization resolution sidelobe level 3D cavity reflectance at any polarization cavity reflectance (line or arc) antenna efficiency TRP, TIS, EIRP and EIS. Frequency band: StarLab 6 GHZ - 650 MHZ to 6 GHZ



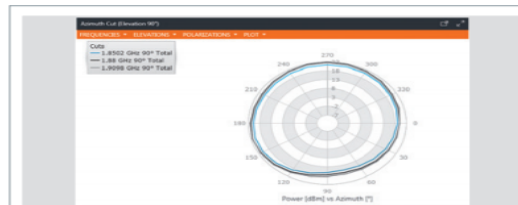
TIS预计测量时间 (一个信道每隔30° 取样)

灵敏度算法 \ 标准	GSM GPRS EDGE	CDMA 1 x RTT 1 x EvDO	WCDMA HSDPA LTE FDD/TDD	Wi-Fi 802.11 a/b/g/n	CTIA 批准方法
RSSI模式+线性化+TIS补偿	8 min		10 min		是
EIS模式+TIS补偿		5 min		5 min	是 ²
快速CDMA		8 min			No
EIRP模式+TIS补偿				10 min	No

1、根据RTC
2、根据协议

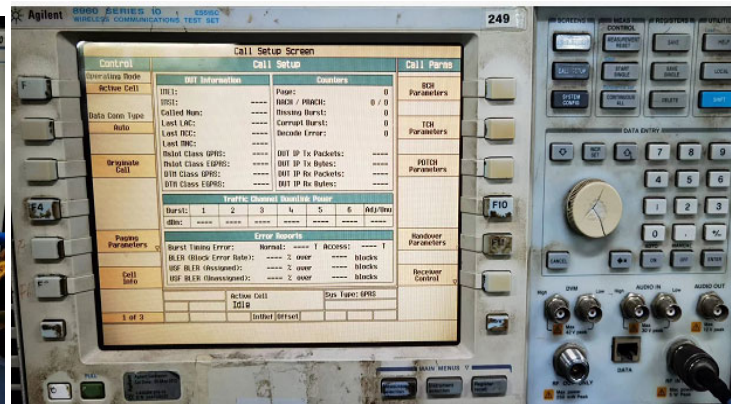


TIS 3D方位切割强度图



TRP 3D方位切割强度图

Test Equipment

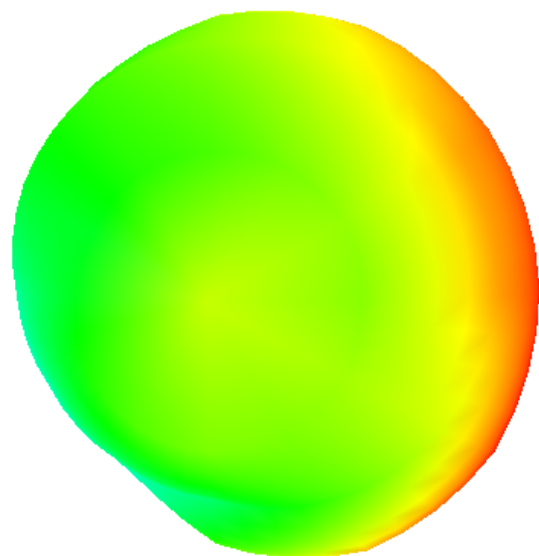


Efficient (2G+3G+4G+2. 4G-WiFi /BT)

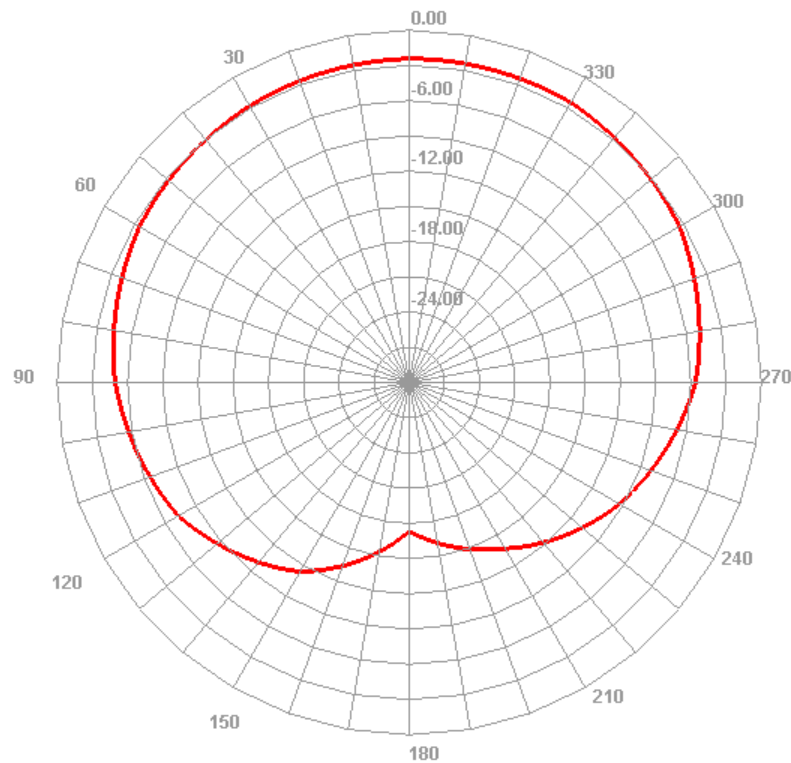
PEAK GAIN			
2G:	Frequency range	Effi %	Gaim dBi
GSM850	824~894Mhz	27. 56	-1. 95
GSM900	880~960Mhz	26. 89	-2. 05
DCS1800	1710~1880Mhz	28. 62	1. 18
PCS1900	1850~1990Mhz	30. 81	0. 82
3G:			
W1	1920~2170Mhz	37. 45	0. 91
W2	1850~1990Mhz	30. 81	0. 82
W4	1710~2155Mhz	31. 07	0. 92
W5	824~894Mhz	27. 56	-1. 95
W8	880~960Mhz	26. 89	-2. 05
4G:			
LTE-B1	1920~2170Mhz	37. 45	0. 91
LTE-B2	1850~1990Mhz	30. 81	0. 82
LTE-B3	1710~1880Mhz	28. 62	1. 18
LTE-B4	1710~2155Mhz	31. 07	0. 92
LTE-B5	824~894Mhz	27. 56	-1. 95
LTE-B7	2500~2690Mhz	28. 01	1. 12
LTE-B8	880~960Mhz	26. 89	-2. 05
LTE-B20	791~862Mhz	27. 56	-1. 95
LTE-B28	708~798Mhz	19. 05	-2. 33
LTE-B38	2570~2620Mhz	28. 01	1. 12
LTE-B40	2300~2400Mhz	29. 21	1. 14
LTE-B41	2500~2690Mhz	28. 01	1. 12
5G-WIFI	5150~5850Mhz	37. 16	1. 91
2. 4G-WIFI	2400~2500Mhz	42. 52	1. 37
BT	2400~2500Mhz	42. 51	1. 37
GPS	1575Mhz	38. 73	0. 43

Efficient (700–798MHz)

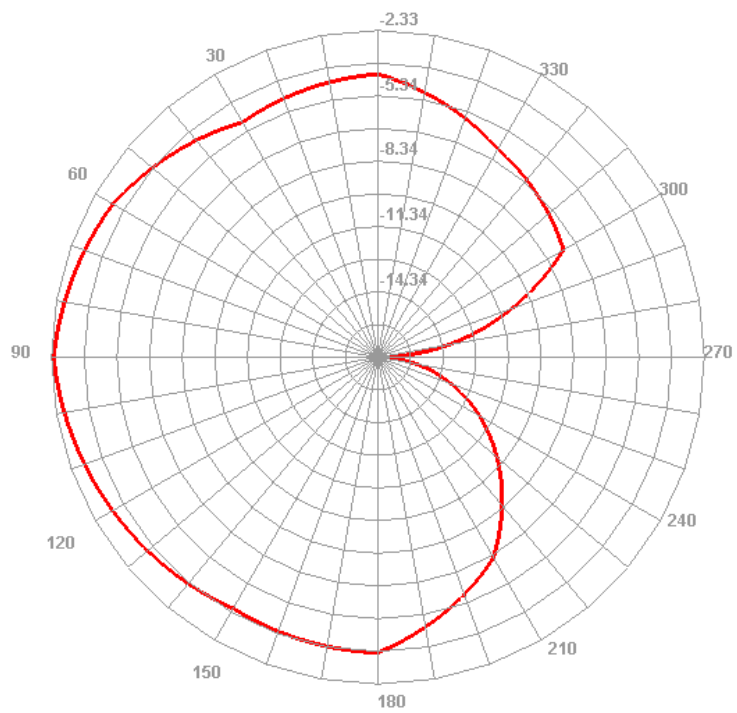
730.000MHz



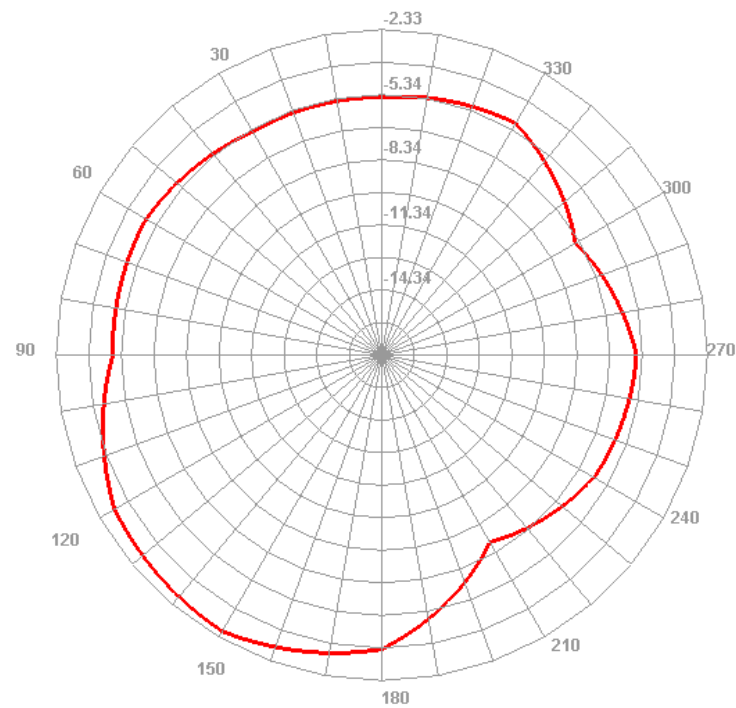
730.000MHz H



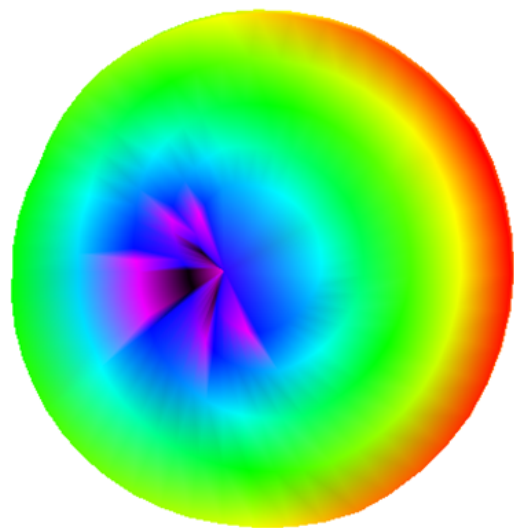
730.000MHz E1



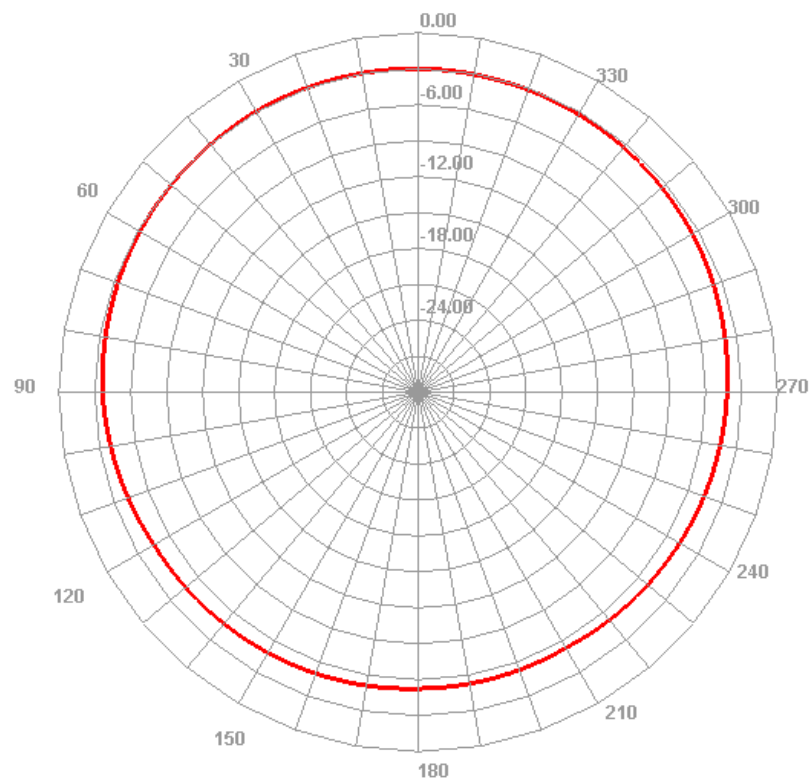
730.000MHz E2



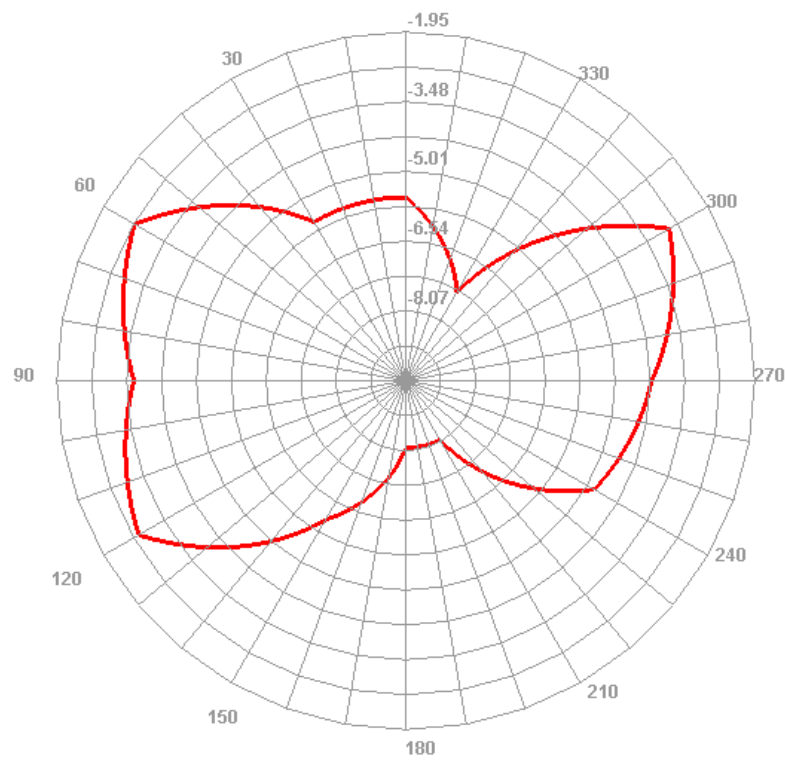
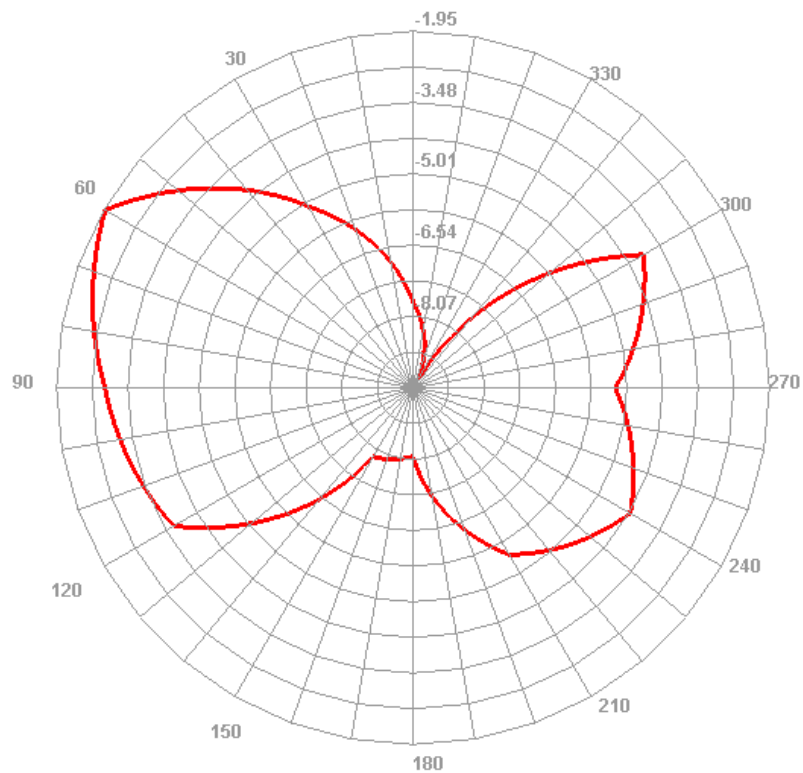
Efficient (791-894MHz)
840.000MHz



840.000MHz H

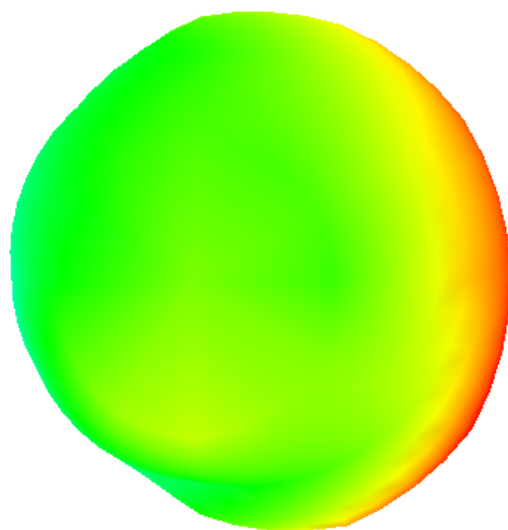


840.000MHz E1

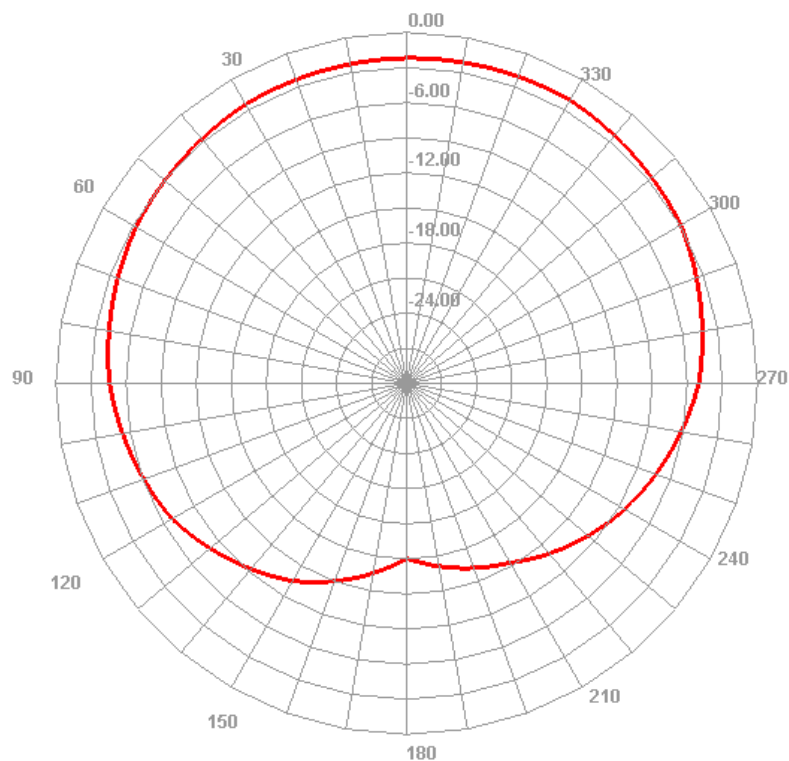


Efficient (880–960MHz)

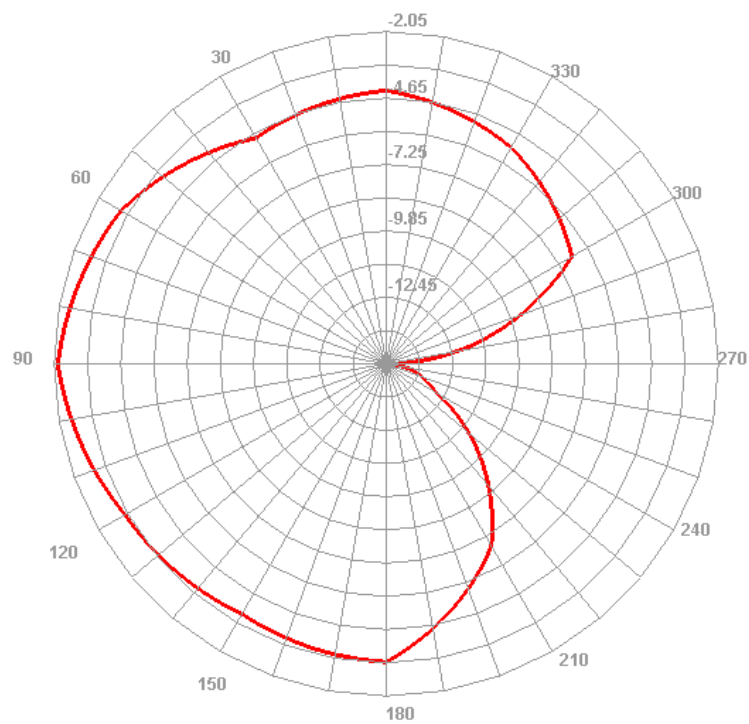
940.000MHz



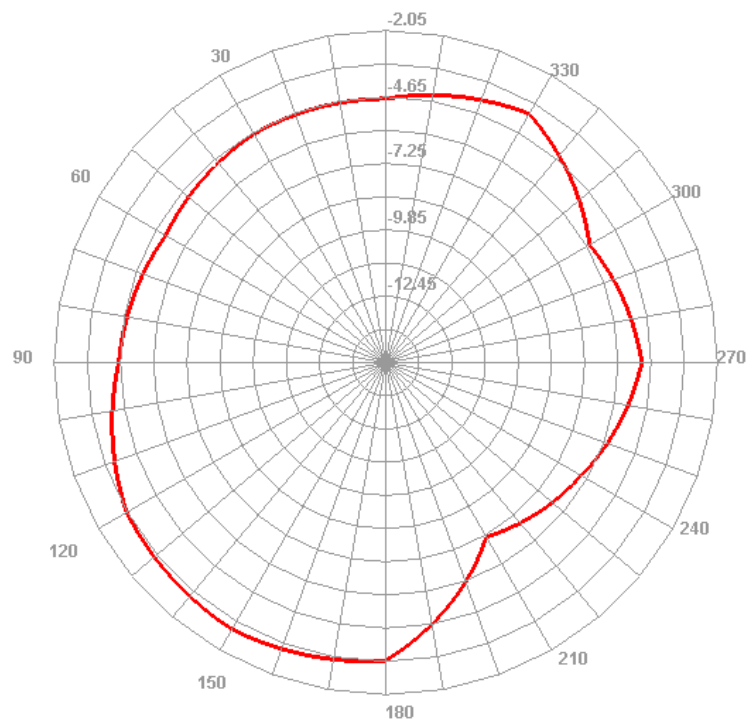
940.000MHz H



940.000MHz E1

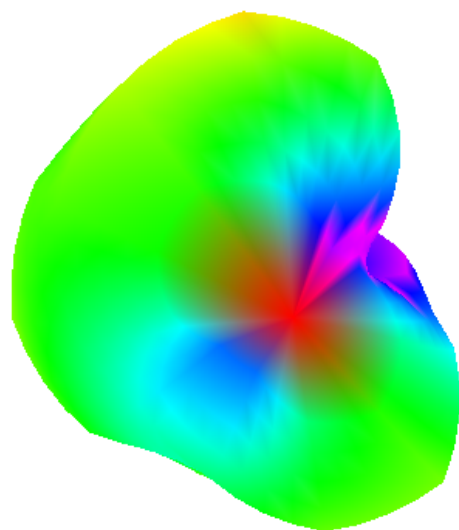


940.000MHz E2

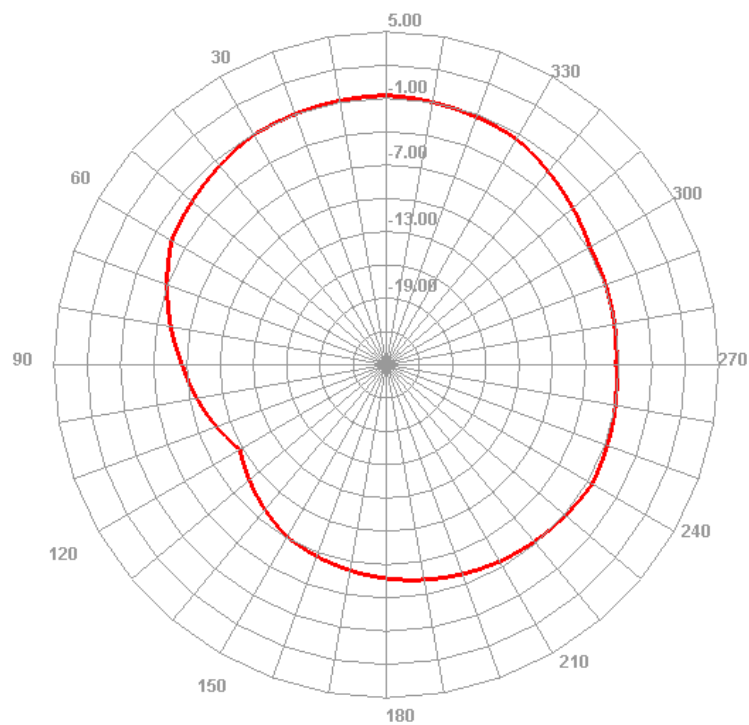


Efficient (1710–1880MHz)

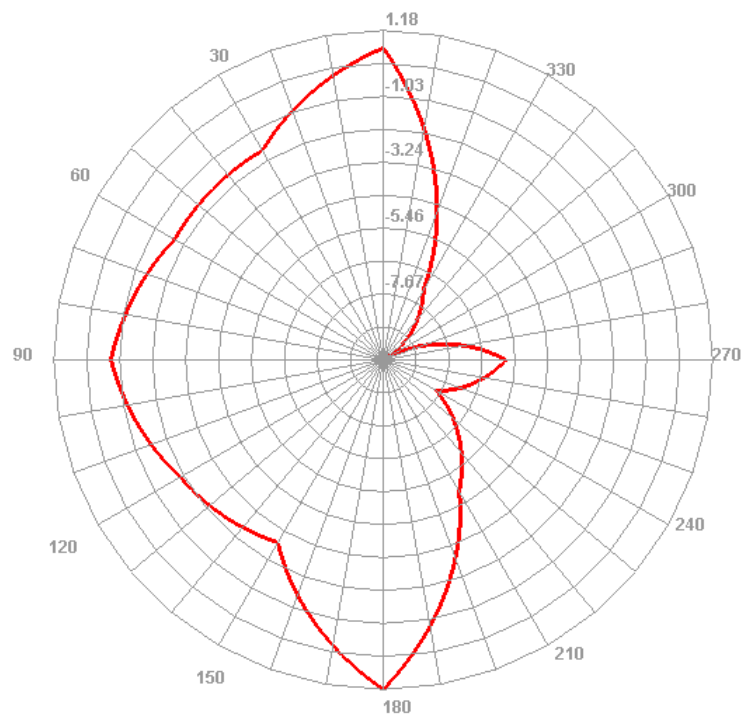
1720.000MHz



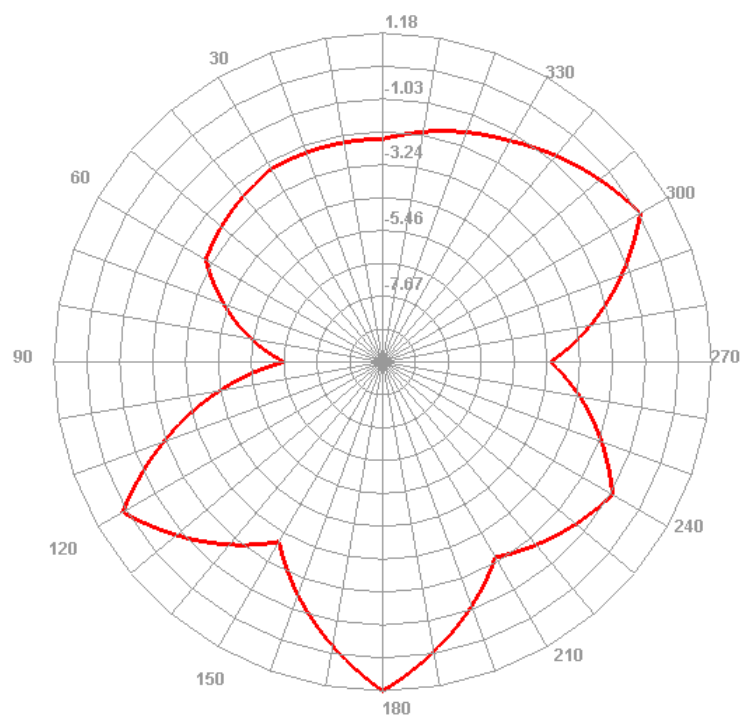
1720.000MHz H



1720.000MHz E1

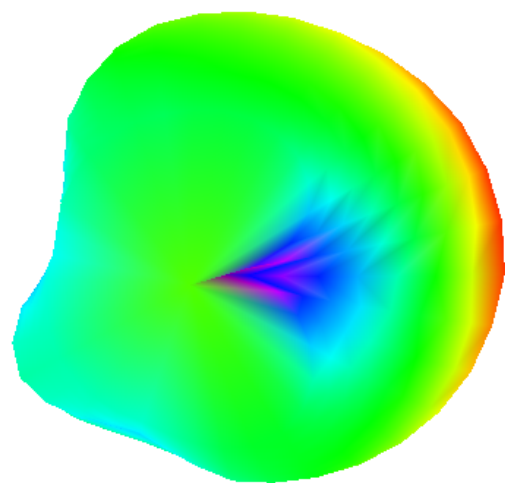


1720.000MHz E2

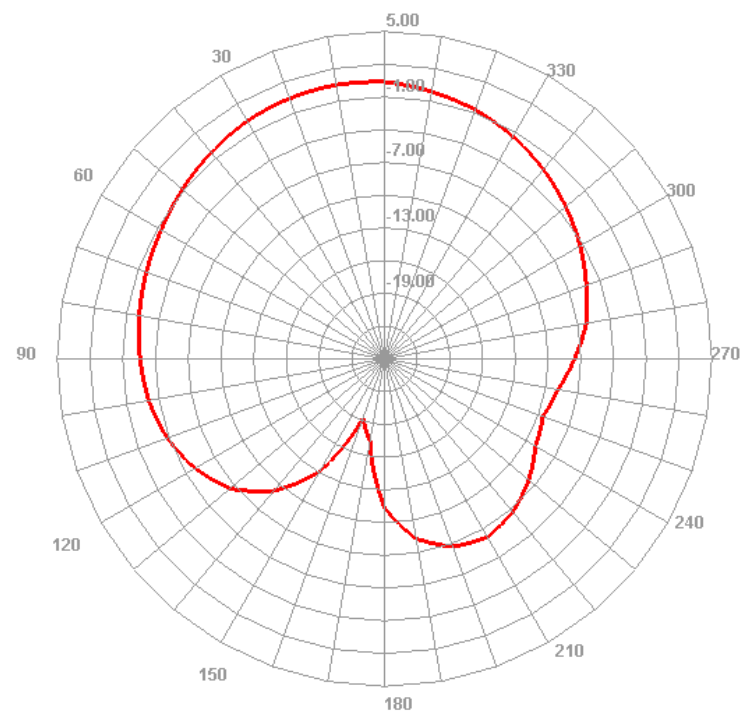


Efficient (1710-1990MHz)

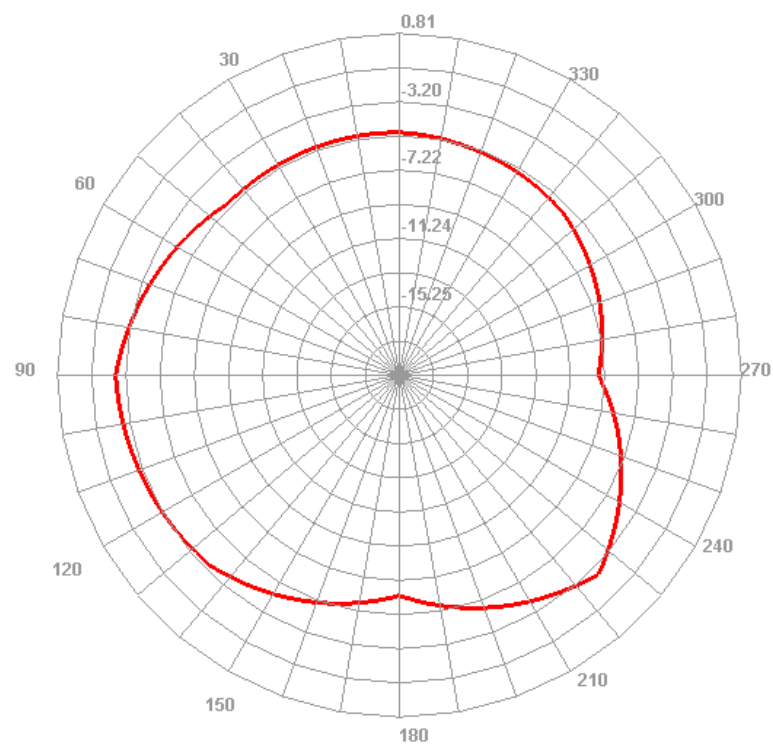
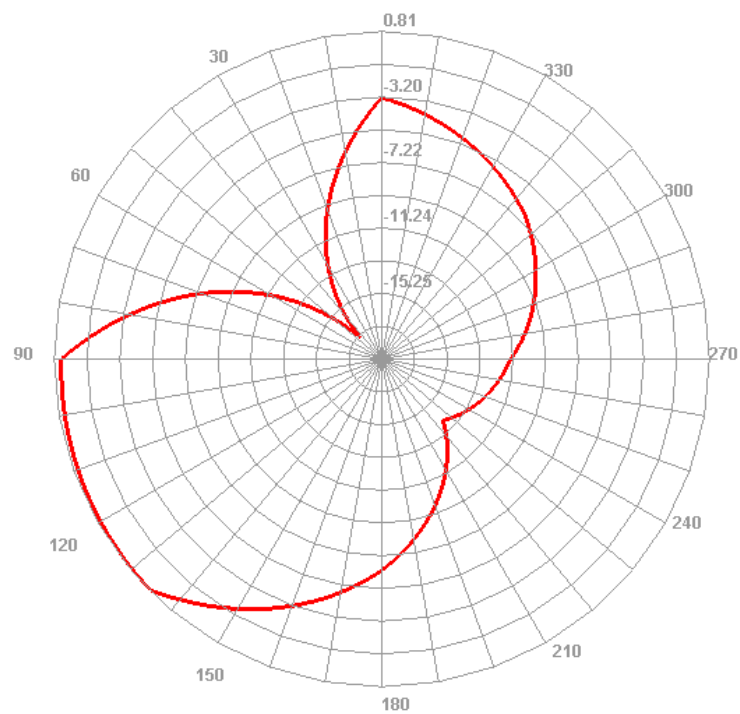
1920.000MHz



1920.000MHz H

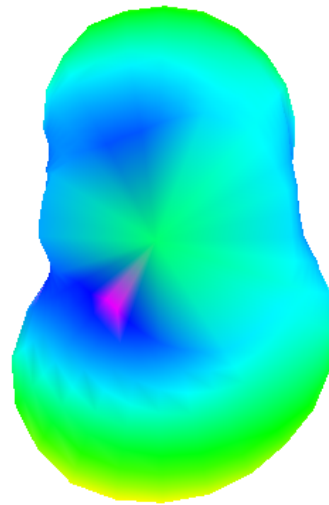


1920.000MHz E1

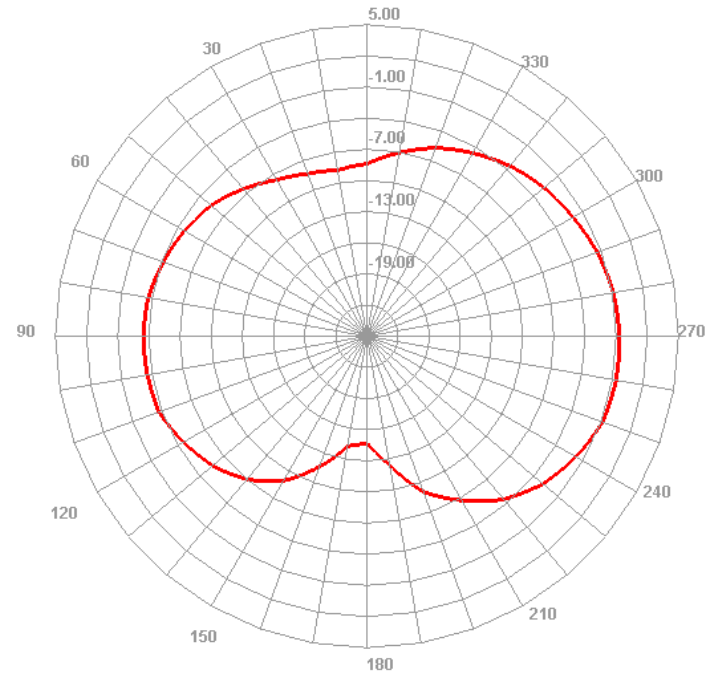


Efficient (1920-2170MHz)

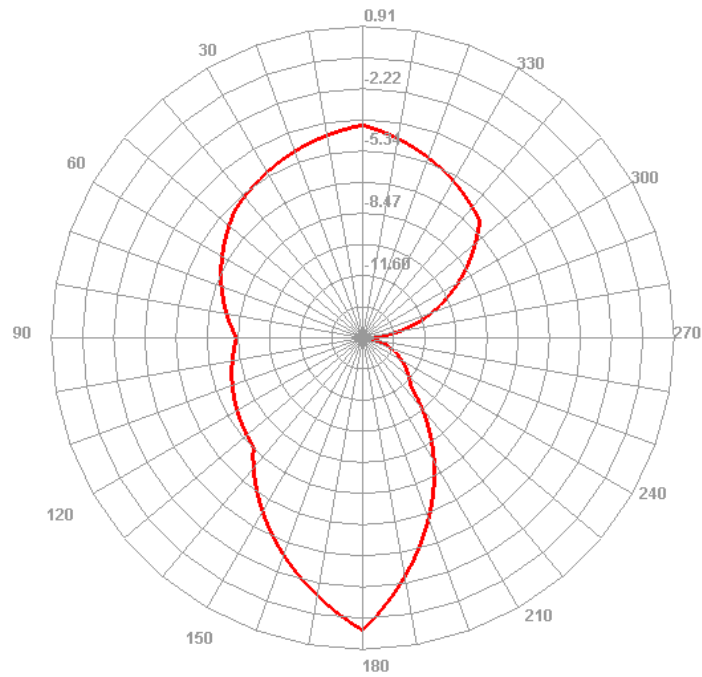
2010.000MHz



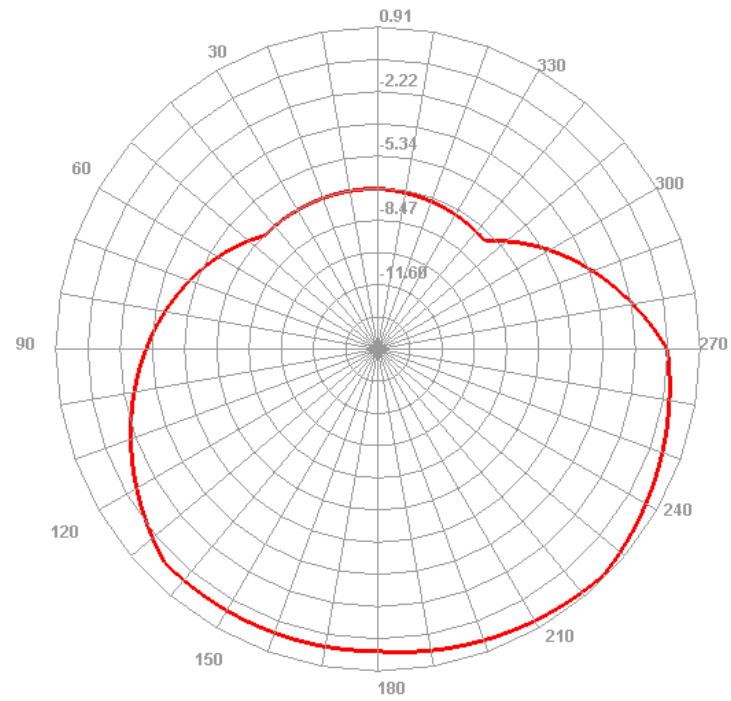
2010.000MHz H



2010.000MHz E1

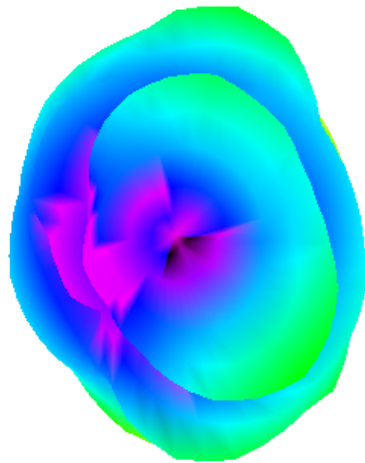


2010.000MHz E2

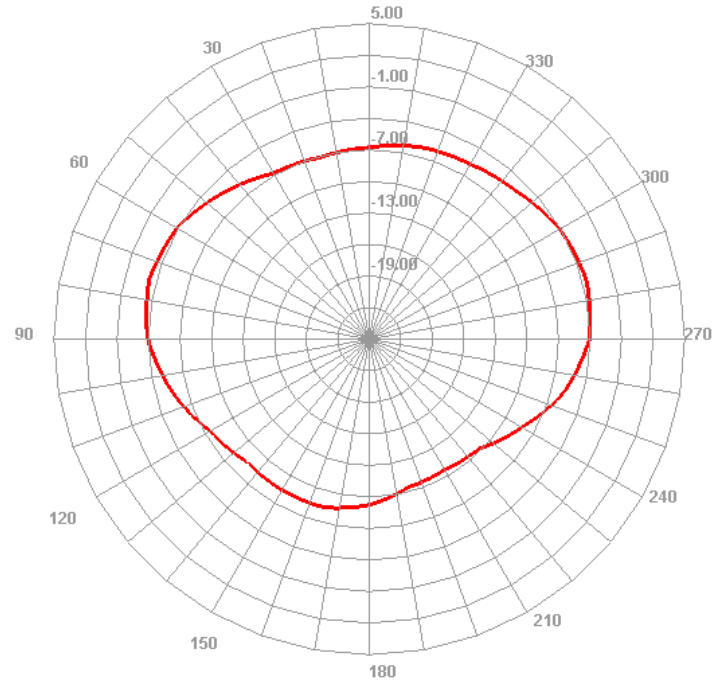


Efficient (2300–2400MHz)

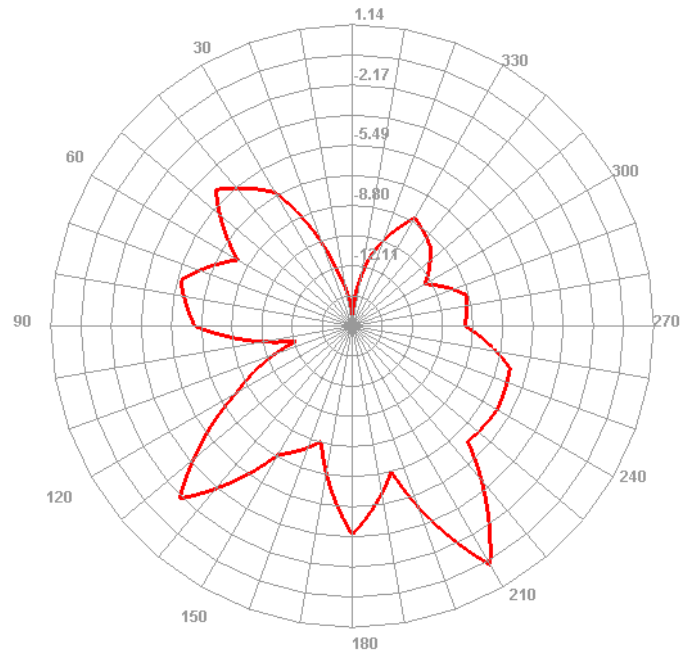
2370.000MHz



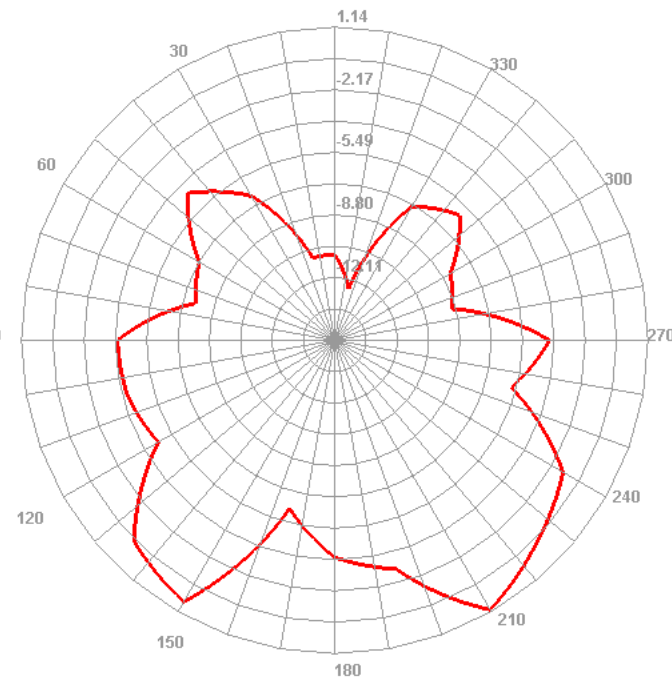
2370.000MHz H



2370.000MHz E1

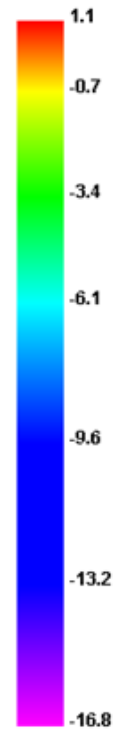
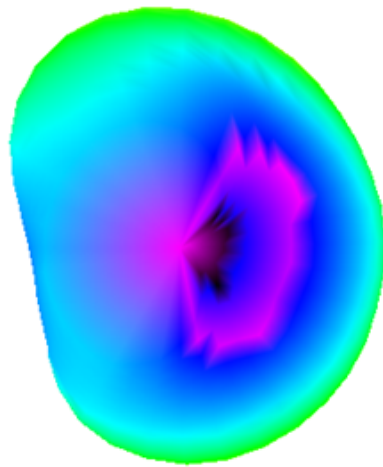


2370.000MHz E2

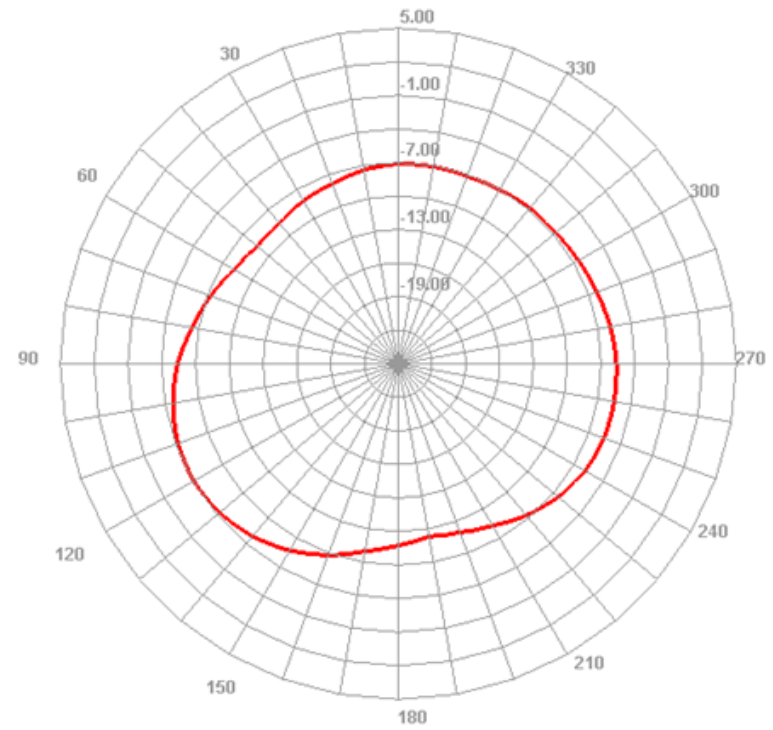


Efficient (2500–2690MHz)

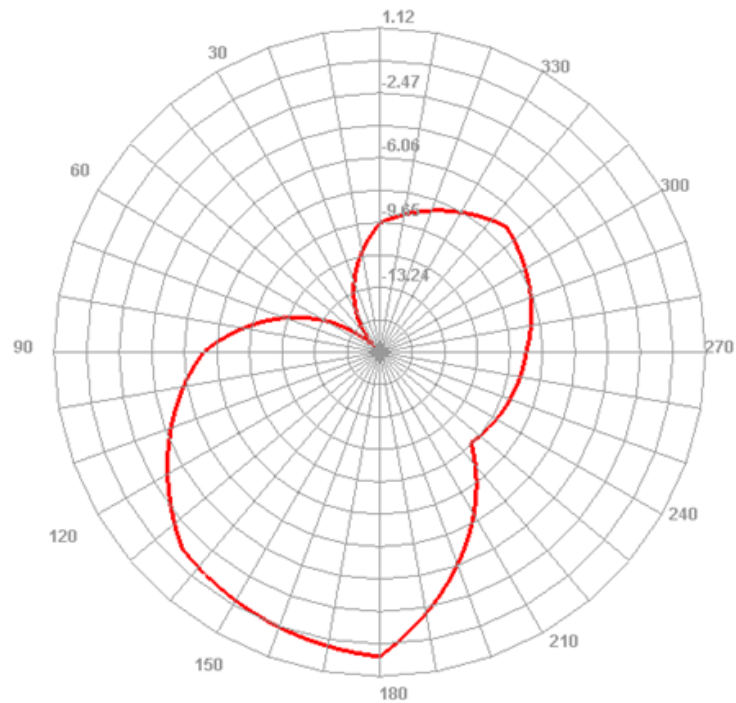
2660.000MHz



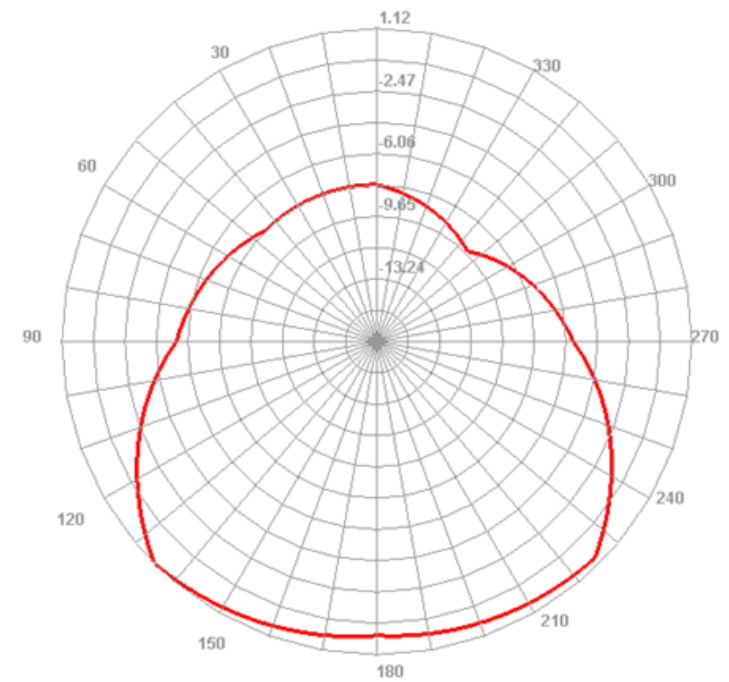
2660.000MHz H



2660.000MHz E1

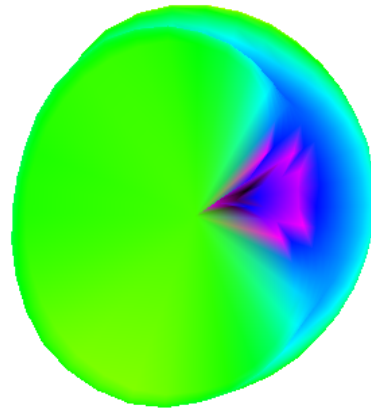


2660.000MHz E2

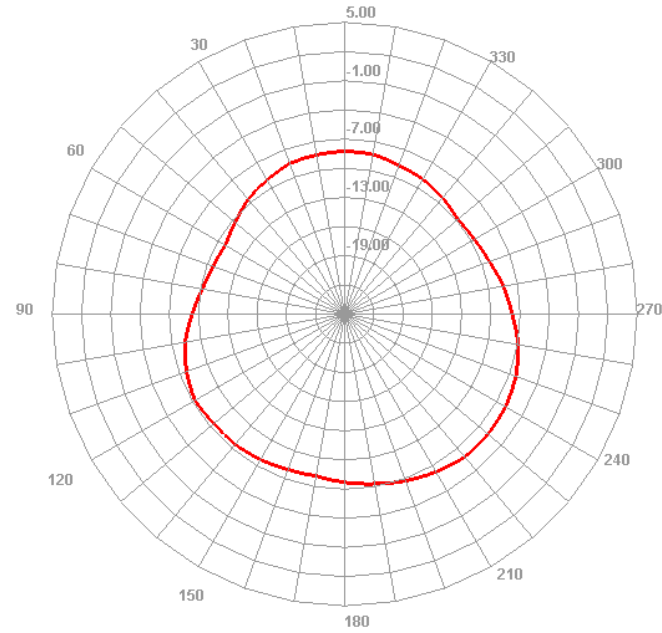


Efficient (2. 4G-WIFI/BT 2400-2500MHz)

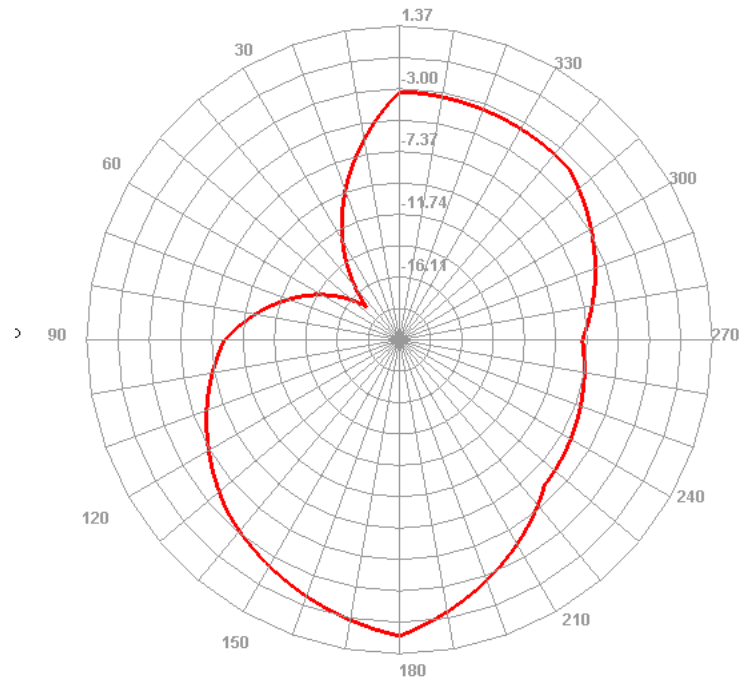
2450.000MHz



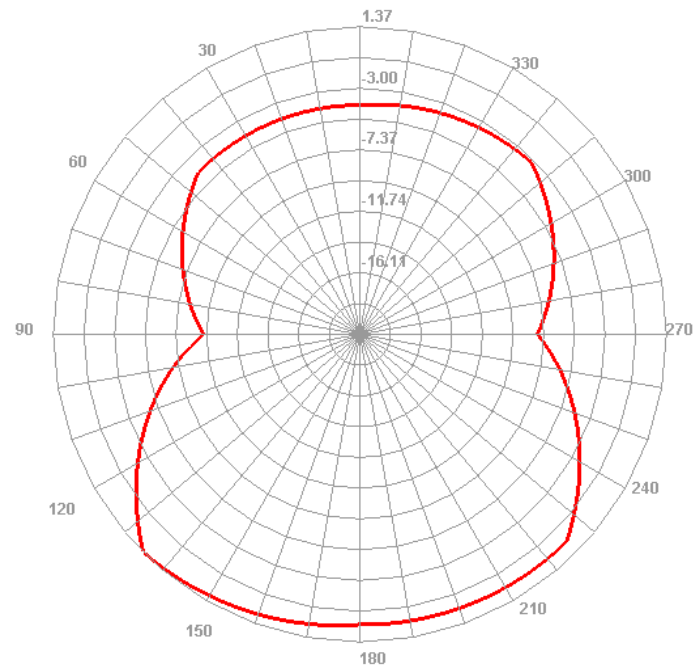
2450.000MHz H



2450.000MHz E1

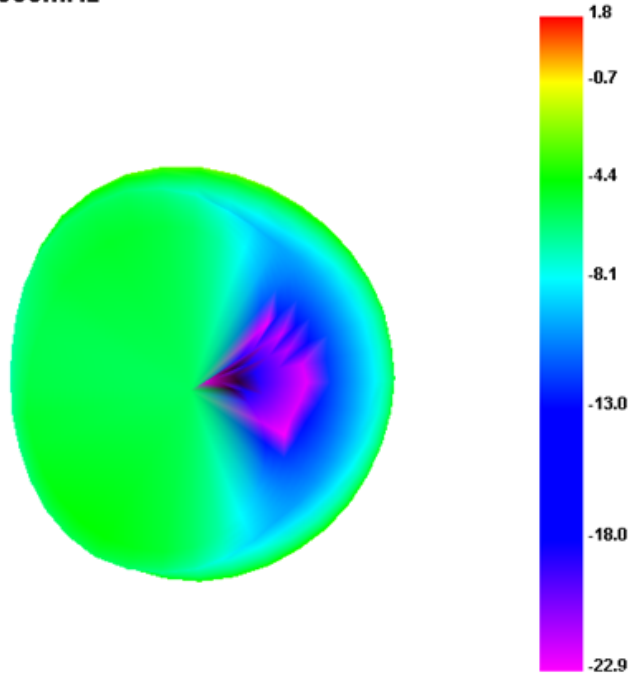


2450.000MHz E2

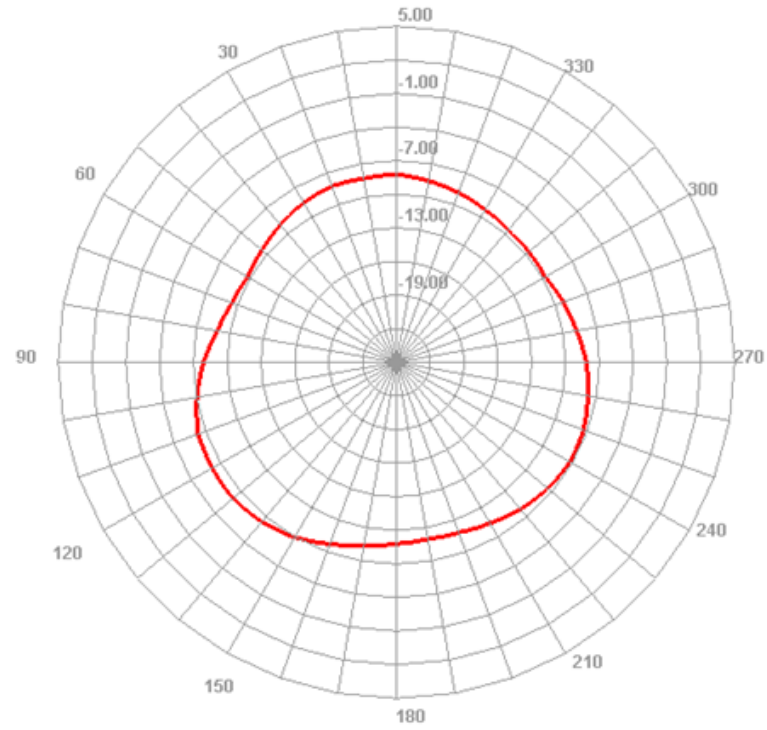


Efficient (5G-WIFI 5000-5250MHz)

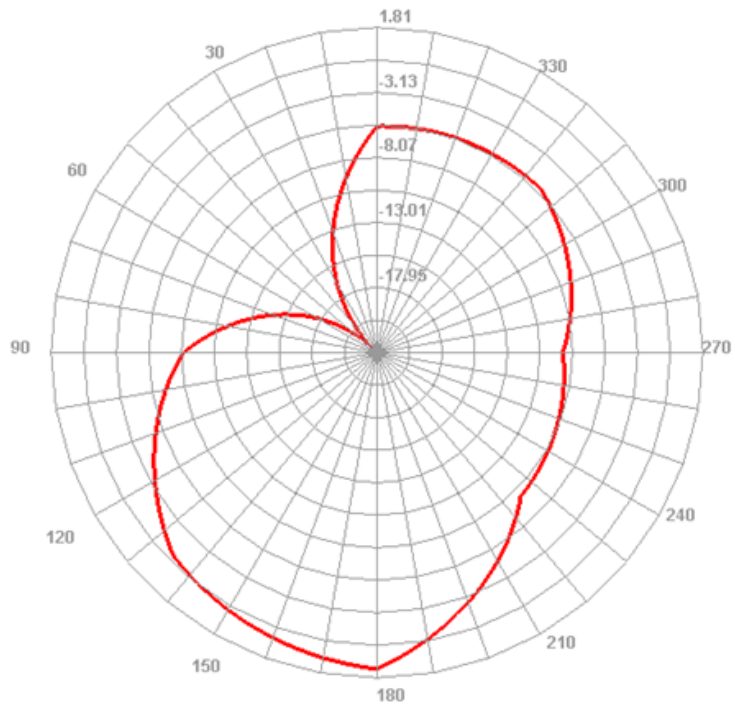
5150.000MHz



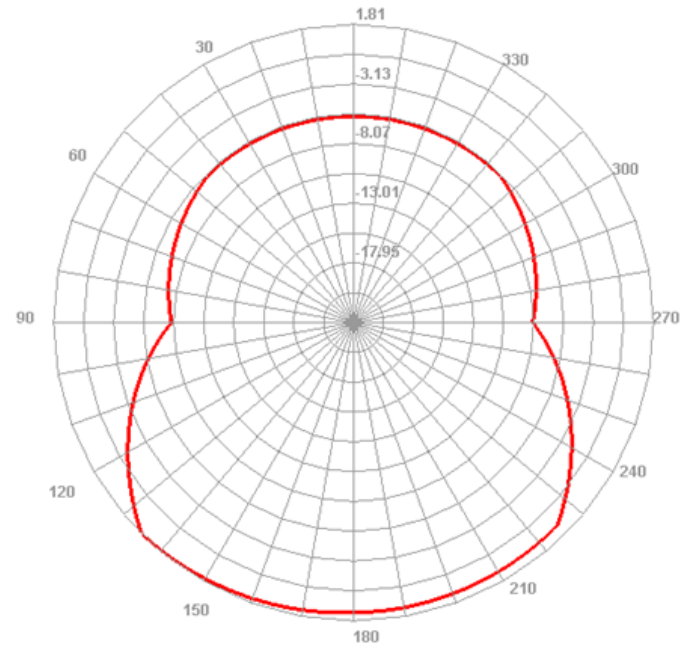
5150.000MHz H



5150.000MHz E1

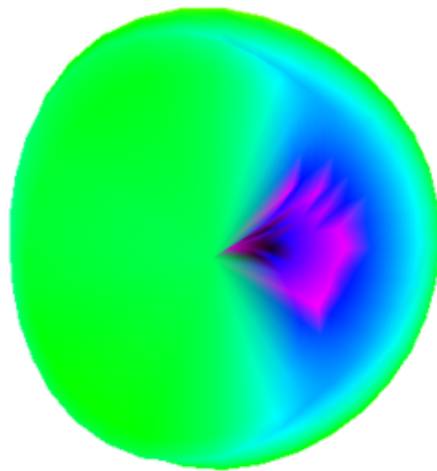


5150.000MHz E2

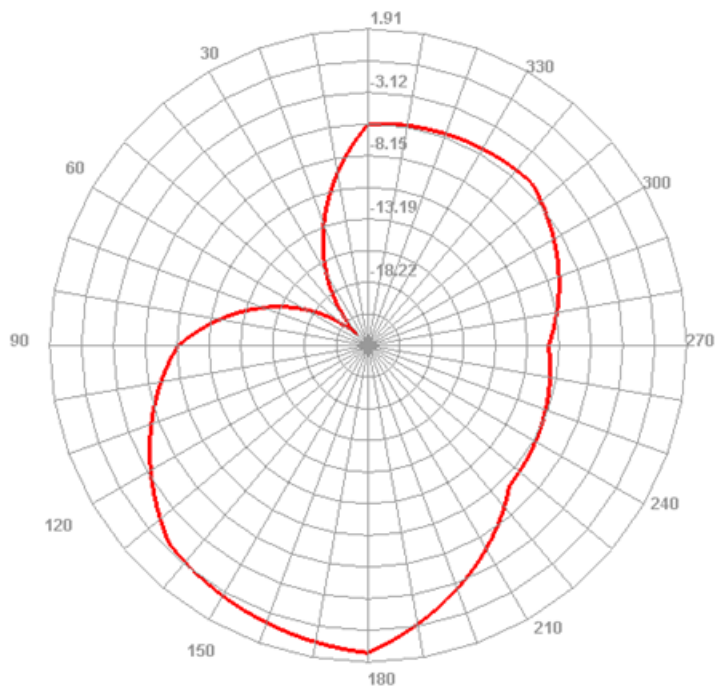


Efficient (5G-WIFI 5725-5850MHz)

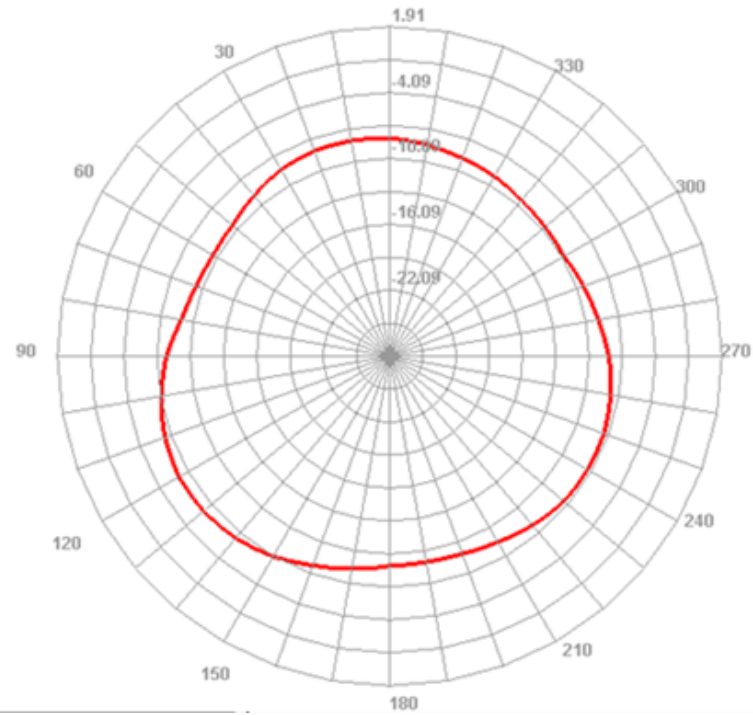
5740.000MHz



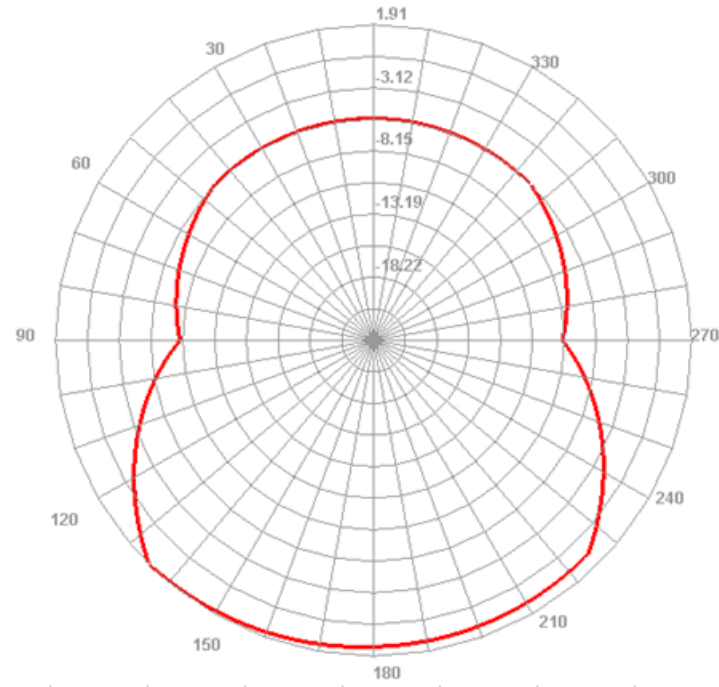
5740.000MHz E1



5740.000MHz H

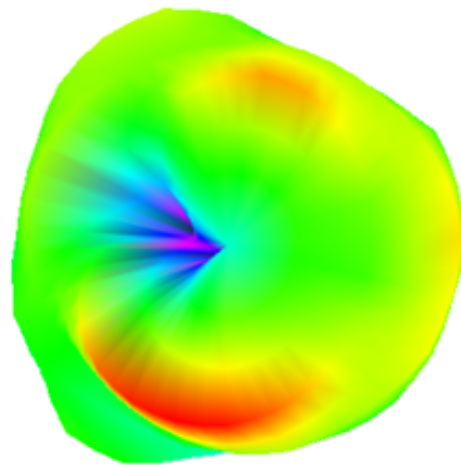


5740.000MHz E2

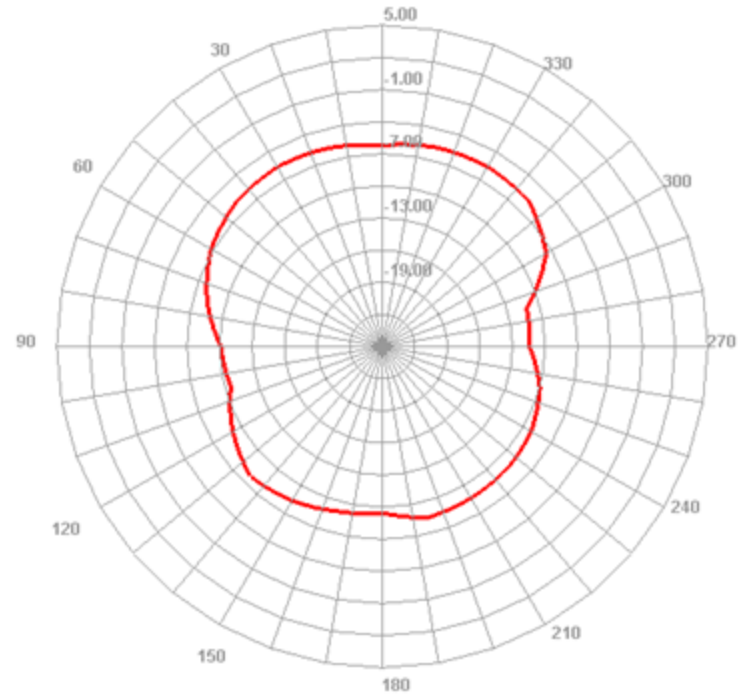


Efficient (GPS 1575.42MHz)

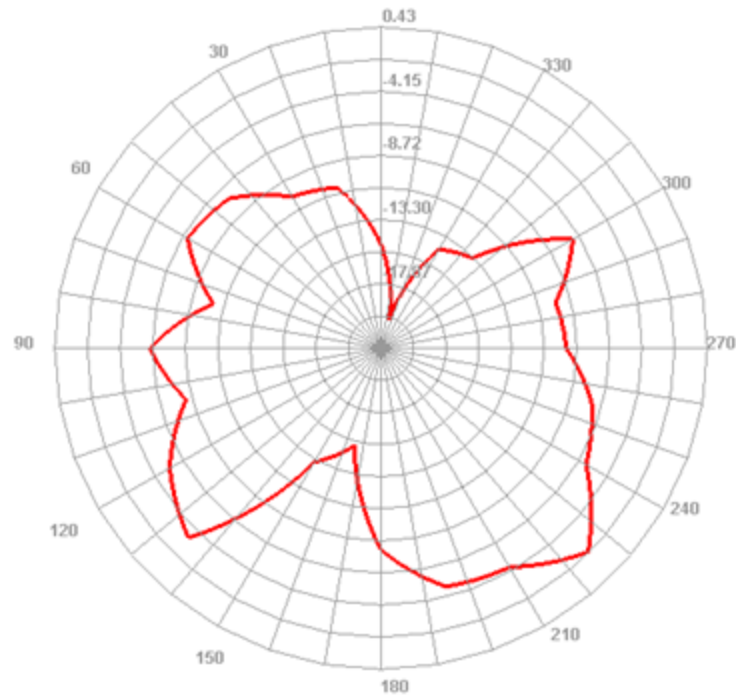
1575.491MHz



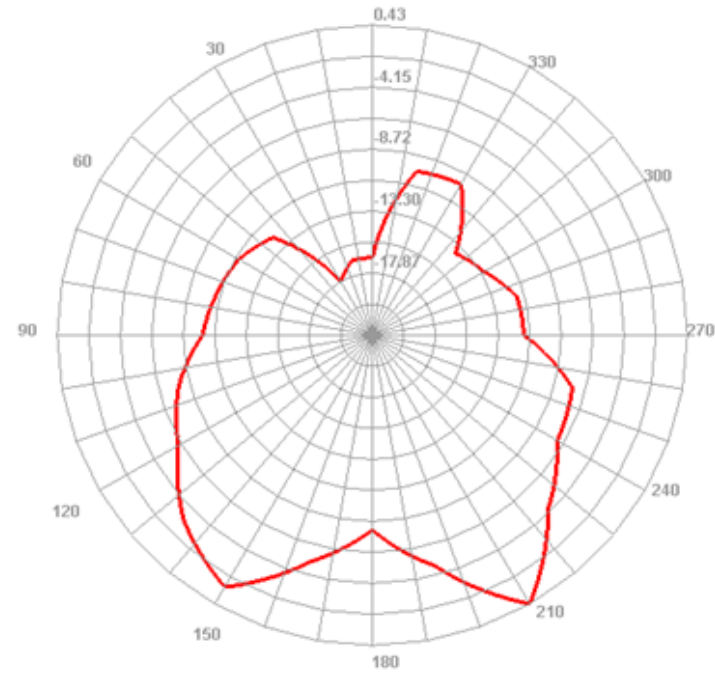
1575.491MHz H



1575.491MHz E1



1575.491MHz E2



Master antenna specifications

version	Modify the content	modifier	Date of revision

Shape + screen printing

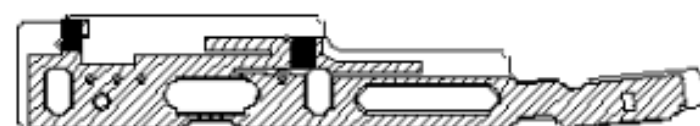


Half and half black covering film
silkscreen white characters



substrate	Half to 1/3	
	Half and half	✓
	A pair and a half	
	one-to-one	

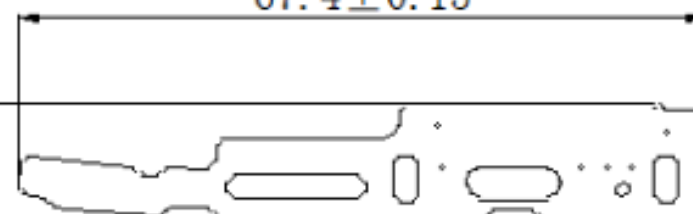
Total thickness $0.12 \pm 0.03 \text{ mm}$



Finished product drawing-front

11.04 ± 0.15

67.4 ± 0.15



Hand tear line back glue map-back

NOTES:

1. Gunned paper: 3M467;
2. The gold finger has a gilded surface $0.5 \sim 3 \mu\text{m}$; Attention to materials, No oxidation is allowed in this position.
3. The overall thickness should be less than or equal to 0.12 mm ;
4. Precise tolerance range: $\pm 0.03 \text{ mm}$;
5. Only the product diagram is allowed to conduct electricity;

Amplification at A



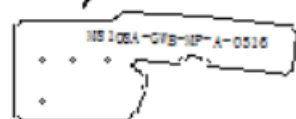
The front side is the covering film $13-20 \mu\text{m}$
The second layer is copper $\text{Cu} 18 \mu\text{m}$
The third layer is AD glue $\text{ADH} 13-18 \mu\text{m}$
The fourth substrate $\text{PI} 12.5 \mu\text{m}$
Back adhesive $3\text{M}300\text{LE} 9471 \quad 50 \mu\text{m}$

Huaxin Micro Communication Technology Co. LTD					
	unit: mm	name: FPC	date: 2025-06-14		
General tolerances:		Material number: MS108A-GSM	design: zhushunshen		
± 0.5		material: FPC+3M467	R F:		
± 0.25		Surface treatment: clean	confirm:		
± 0.05		color:	proportion: 1:1	version: A	
± 0.05					
ANGULAR	$\leq \pm 0.5^\circ$				

DF V0.1
DF V0.2
DF V0.3
DF V0.4
DF V0.5
DF V0.6
DF V0.7
DF V0.8
DF V0.9
DF V0.10

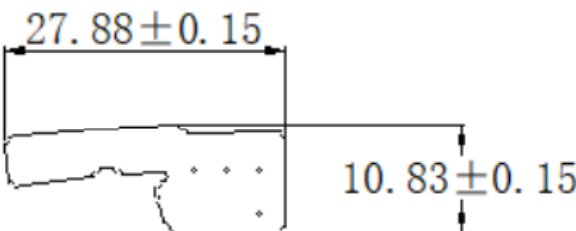
	version	Modify the content	modifier	Date of revision

Shape + screen printing → Half and half black covering film
silkscreen white characters



substrate	Half to 1/3	
	Half and half	✓
	A pair and a half	
	one-to-one	

Total thickness $0.12 \pm 0.03\text{mm}$



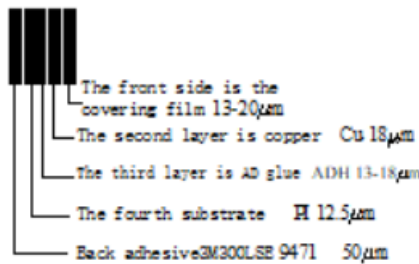
Finished product drawing-front

Hand tear line back glue map-back

NOTES:

1. Gunned paper: 3M467;
2. The gold finger has a gilded surface $0.5 \sim 3\mu$; Attention to materials, No oxidation is allowed in this position.
3. The overall thickness should be less than or equal to 0.12mm ;
4. Precise tolerance range: $\pm 0.03\text{mm}$;
5. Only the product diagram is allowed to conduct electricity;

Amplification at A



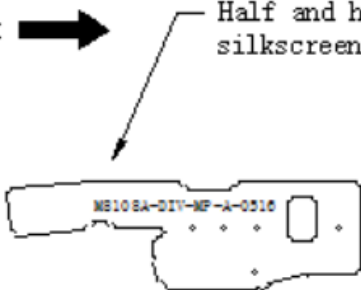
Huaxin Micro Communication Technology Co, LTD				
	unit: mm	name: FPC		date: 2025-06-14
General tolerances: I ±0.5 .X ±0.25 .XI ±0.05 .XXX ±0.05 ANGULAR < ± 0.5°		Material number: MS108A-CWB		design: zhushunshan
		material: FPC+3M467		R F:
		Surface treatment: clean		confirm:
		color:		proportion: 1:1
		version: A		

P V0.1
P V0.2
P V0.3
P V0.4
P V0.5
P V0.6
P V0.7
P V0.8
P V0.9
P V0.10

Diversity antenna specifications

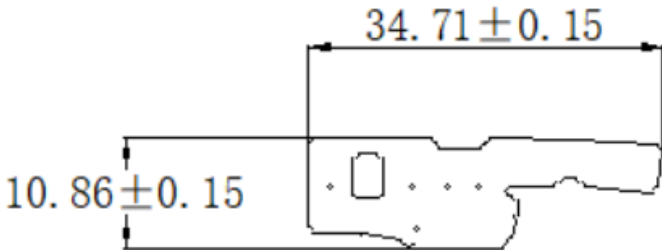
version	Modify the content	modifier	Date of revision

Shape + screen printing → Half and half black covering film
silkscreen white characters



substrate	Half to 1/3	
	Half and half	✓
	A pair and a half	
	one-to-one	

Total thickness $0.12 \pm 0.03\text{mm}$



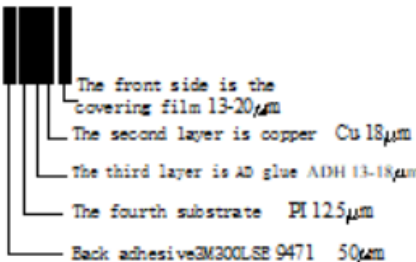
Finished product drawing-front

Hand tear line back glue map-back

NOTES:

1. Gunned paper: 3M467;
2. The gold finger has a gilded surface $0.5 \sim 3\mu$; Attention to materials, No oxidation is allowed in this position.
3. The overall thickness should be less than or equal to 0.12mm ;
4. Precise tolerance range: $\pm 0.03\text{mm}$;
5. Only the product diagram is allowed to conduct electricity;

Amplification at A



Huaxin Micro Communication Technology Co. LTD					
	unit: mm	name: FPC	date: 2025-06-14		
General tolerance: I ± 0.5 .X ± 0.25 .XX ± 0.05 .XXX ± 0.05 ANGULAR $\angle \pm 0.5^\circ$		Material number: MS108A-DIV		design: zhushunshen	
		material: FPC+3M467		R F;	
		Surface treatment: clean		confirm:	
		color:	proportion: 1:1	version: A	

FW.1
FW.2
FW.3
FW.4
FW.5
FW.6
FW.7
FW.8
FW.9
FW.10