



ShenZhen Huaxinwei communication technology
Co.,Ltd.

Antenna test report

Customer Name: Hua Yue Shi Tong

Project Name: L5507A

Designer: Liu Chun Yun

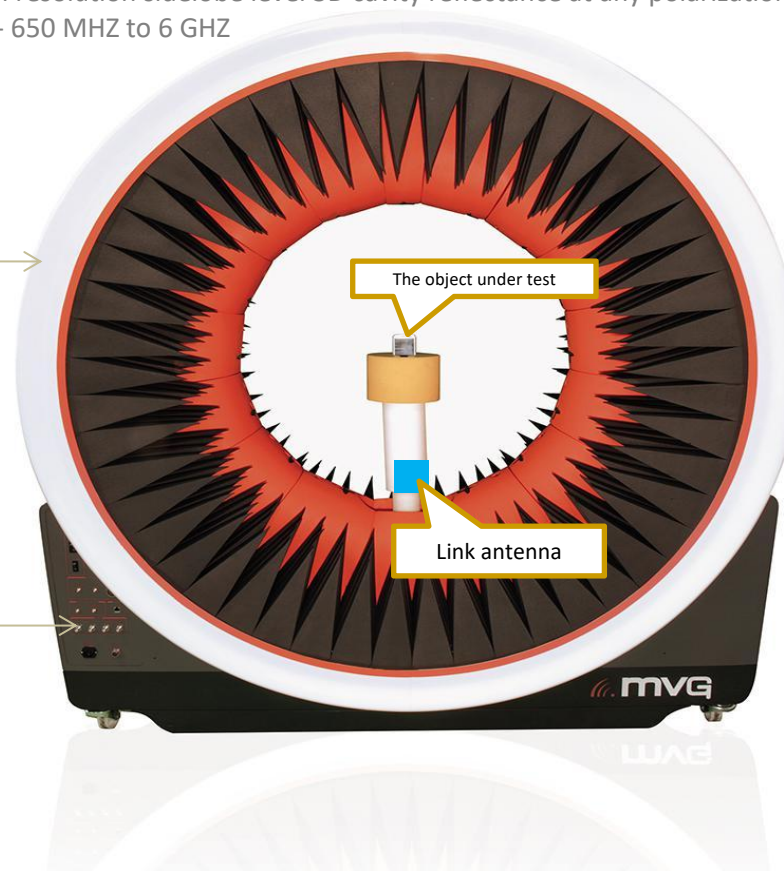
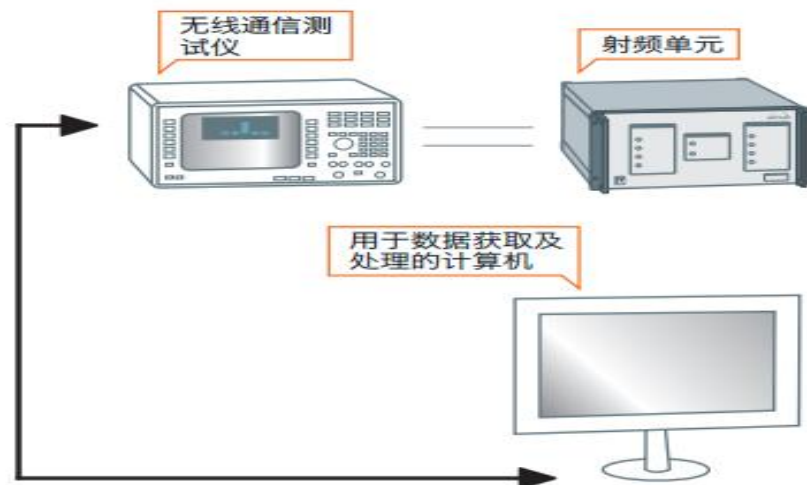
Date: 2022/11/23



The customer name		Hua Yue Shi Tong	Project Name	L5507A
NO.	project	Detailed above		
1	spectrum	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		Liu Chun Yun	15112340864	hxw_lcy@sz-hxw.cn

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



Antenna position

main antenna



diversity antenna



GPS/WIFI/BT antenna

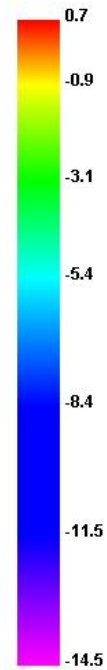
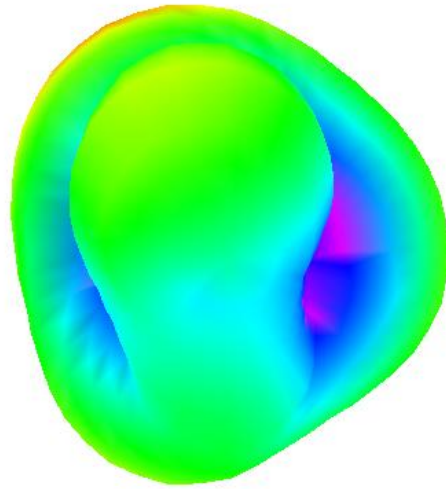
Efficient

PEAK GAIN		
2G	Frequency range	dbi
GSM850	824~894Mhz	-0.68db
GSM900	880~960Mhz	-0.72db
DCS1800	1710~1880Mhz	+0.92db
PCS1900	1850~1990Mhz	+0.97db
3G		
W1	1920~2170Mhz	+1.03db
W2	1850~1990Mhz	+0.97db
W5	824~894Mhz	-0.68db
W8	880~960Mhz	-0.72db
4G		
LTE-B2	1851~1985Mhz	+0.97db
LTE-B3	1710~1880Mhz	+0.92db
LTE-B4	1712~2152Mhz	+0.95db
LTE-B7	2500~2690Mhz	+0.81db
LTE-B12	699~743Mhz	-0.64db
LTE-B17	705~741Mhz	-0.64db
LTE-B28	708~798Mhz	-1.24db
WIFI	2400~2500Mhz	+1.01db
BT	2400~2500Mhz	+1.01db

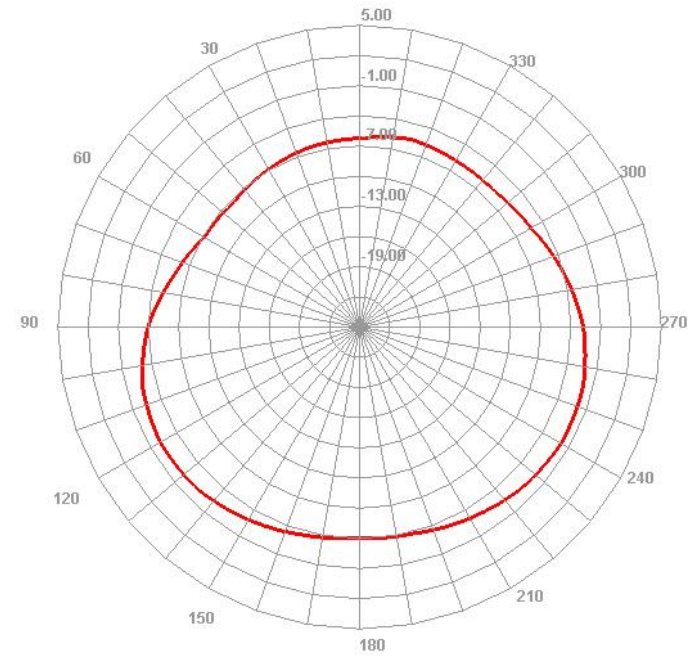
Efficient (GSM850+W5+LTE.B5 824~894Mhz)

Lower antenna

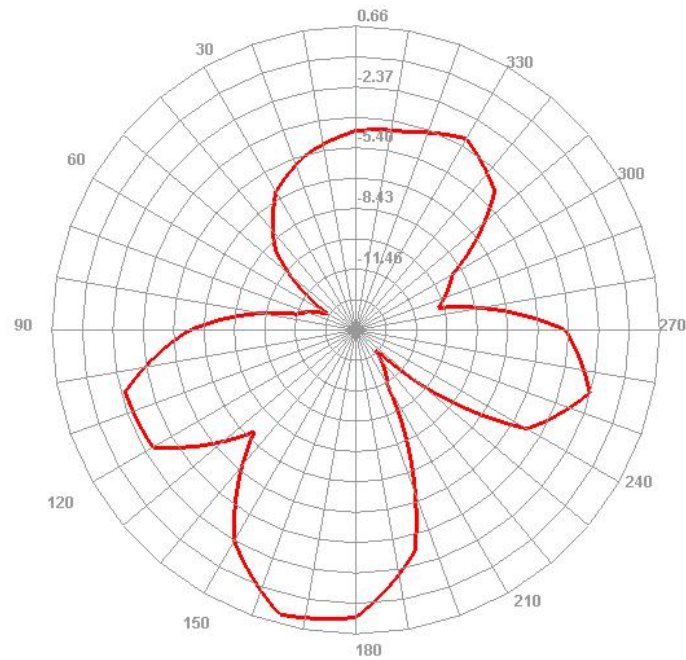
840.000MHz



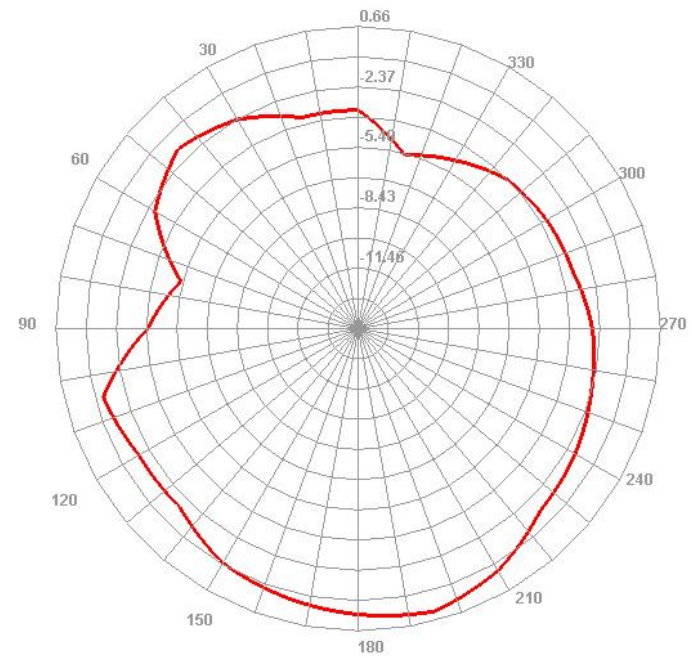
840.000MHz H



840.000MHz E1



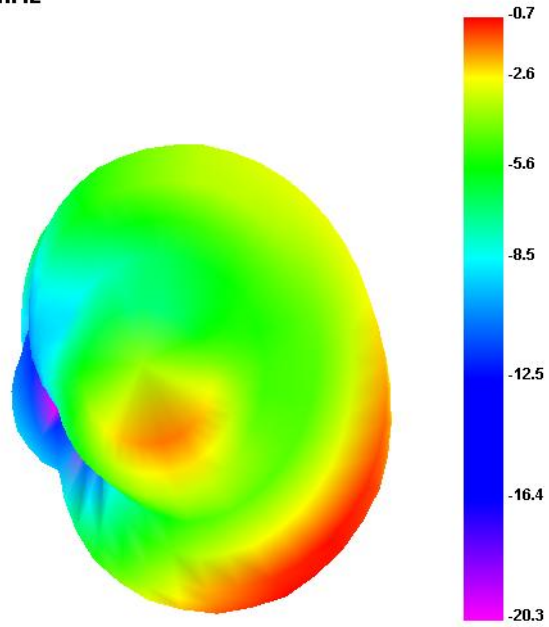
840.000MHz E2



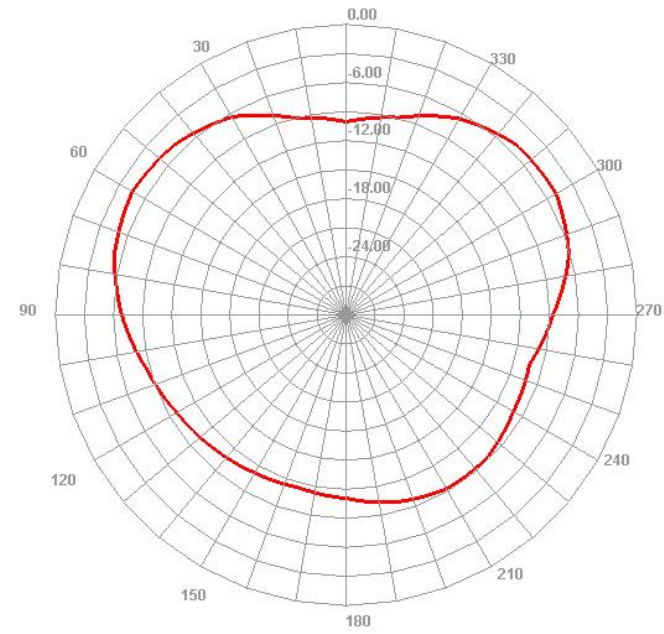
Efficient (GSM900+W8 880~960Mhz)

Lower antenna

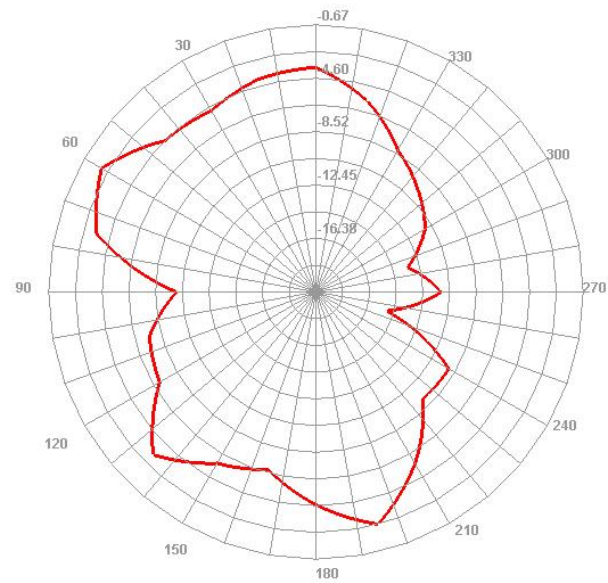
950.000MHz



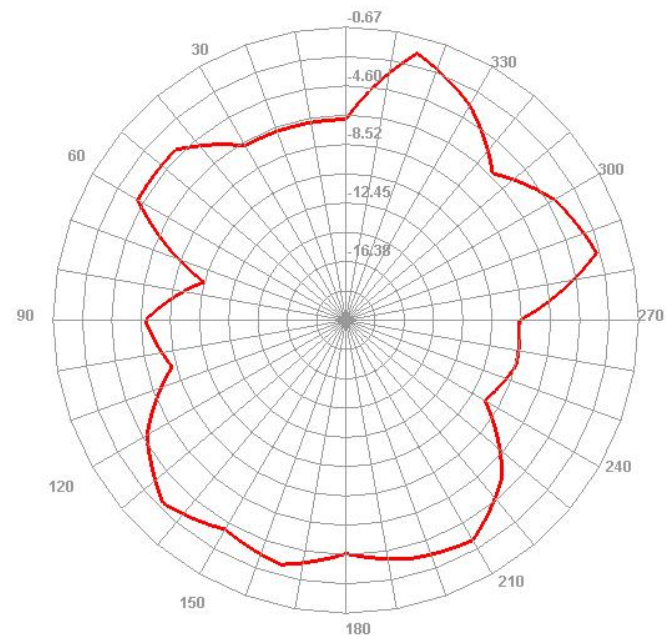
950.000MHz H



950.000MHz E1



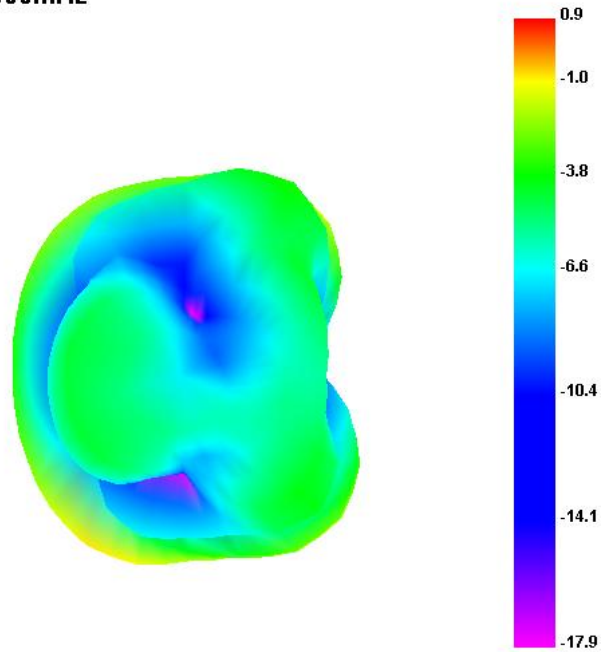
950.000MHz E2



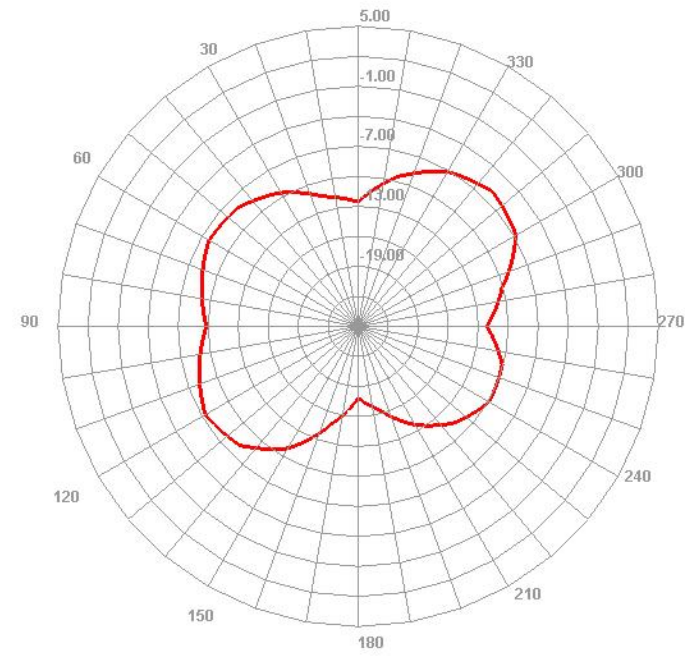
Efficient (GSM1800+LTE.B3 1710~1880MHz)

Lower antenna

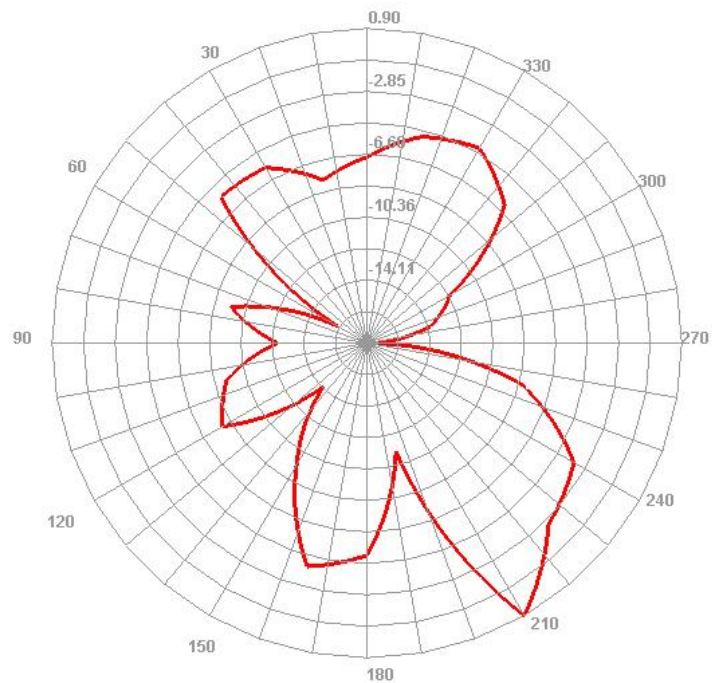
1720.000MHz



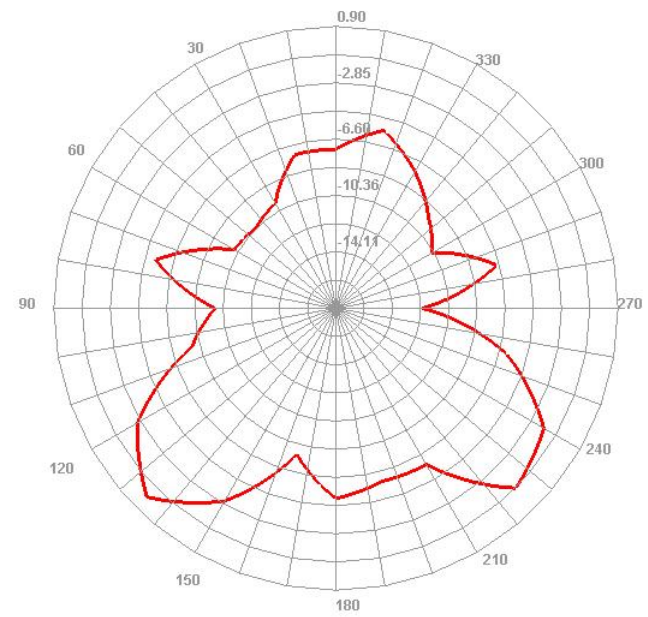
1720.000MHz H



1720.000MHz E1

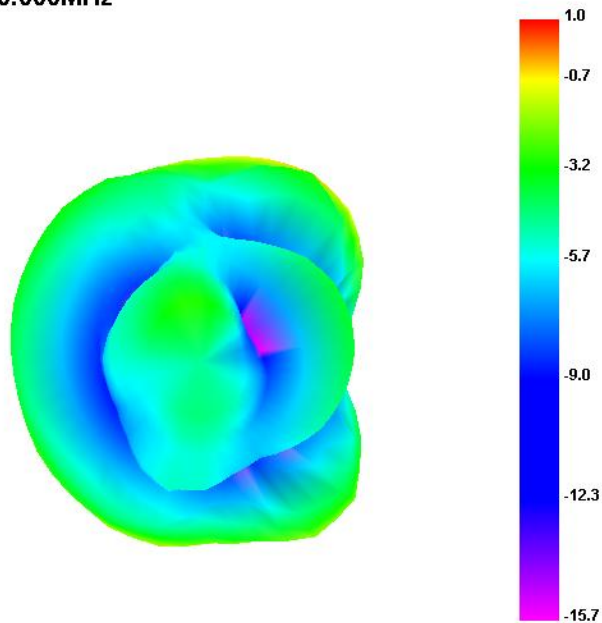


1720.000MHz E2

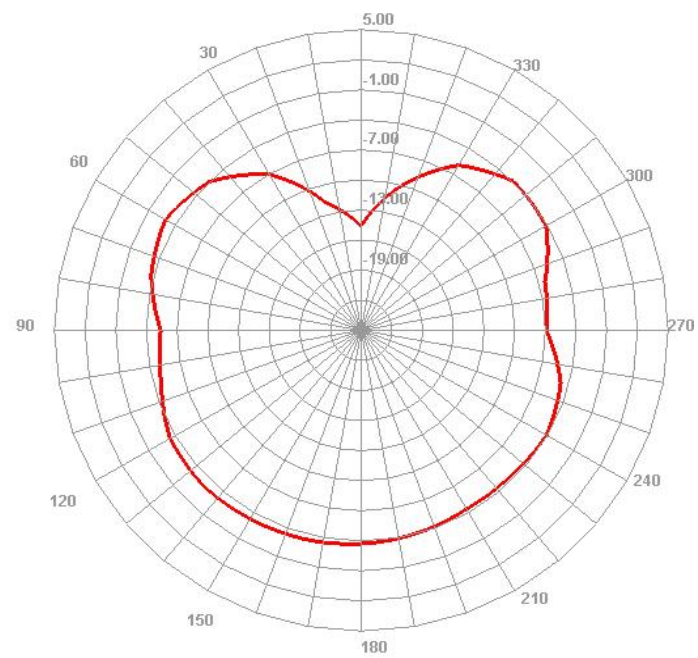


Lower antenna

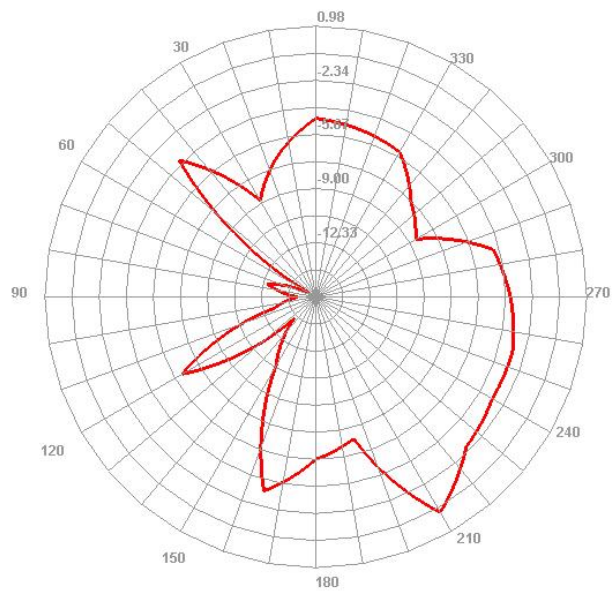
1910.000MHz



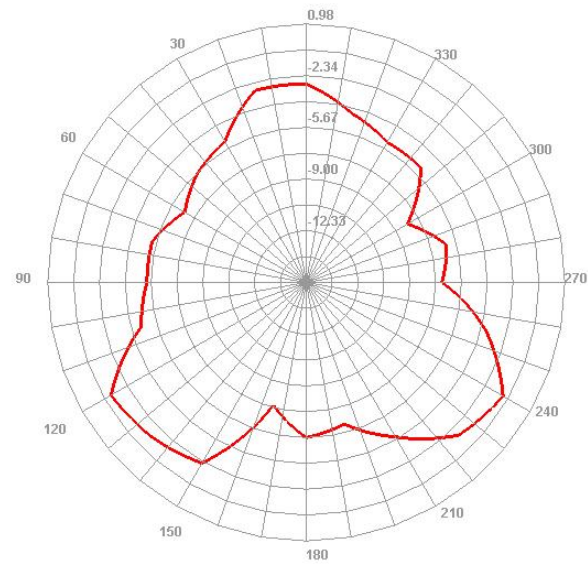
1910.000MHz H



1910.000MHz E1



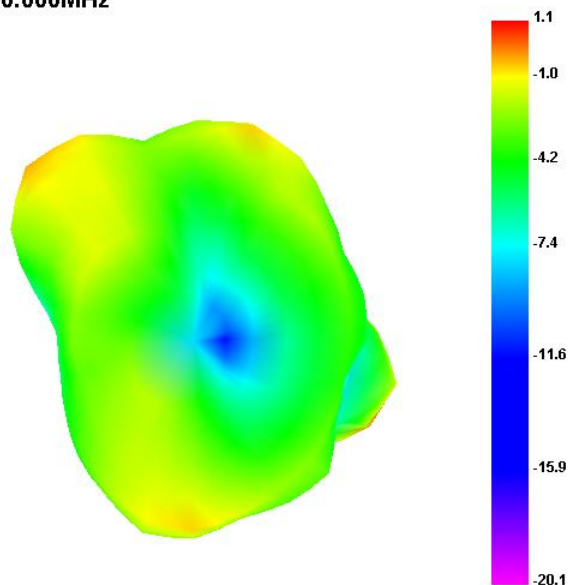
1910.000MHz E2



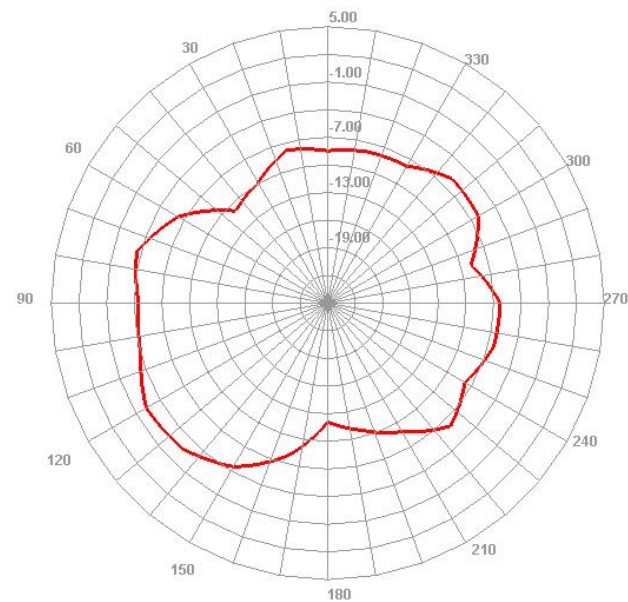
Efficient (W1 1920~2170MHz)

Lower antenna

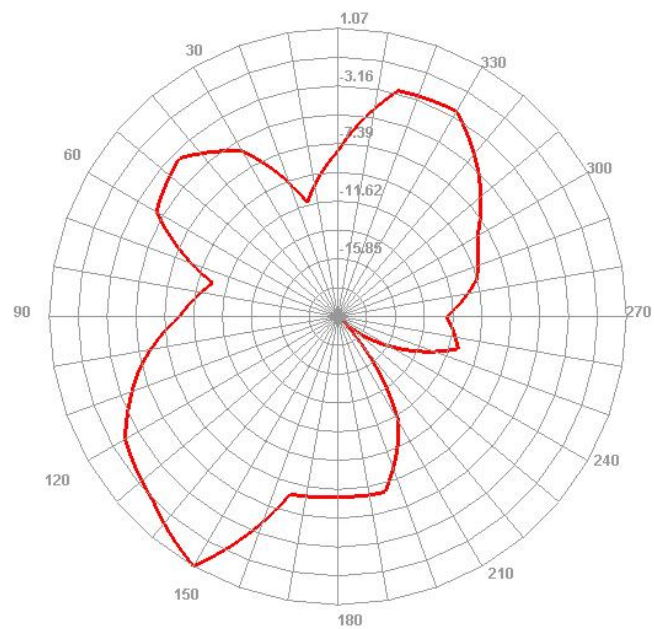
2010.000MHz



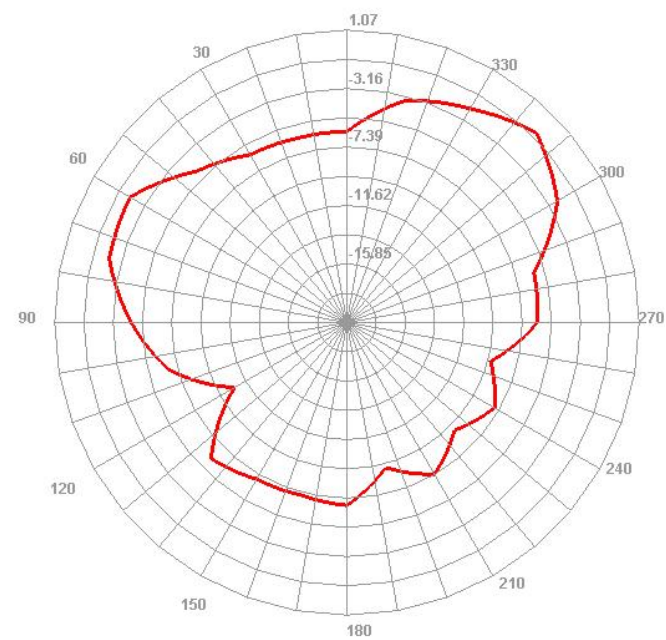
2010.000MHz H



2010.000MHz E1

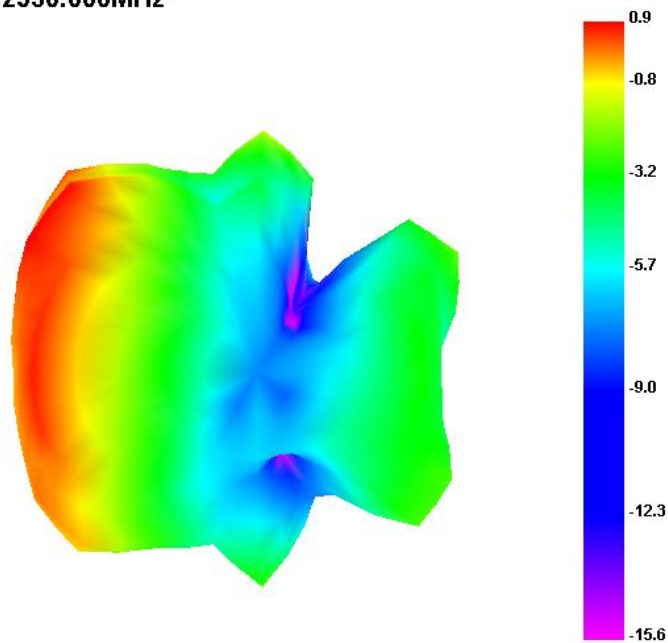


2010.000MHz E2



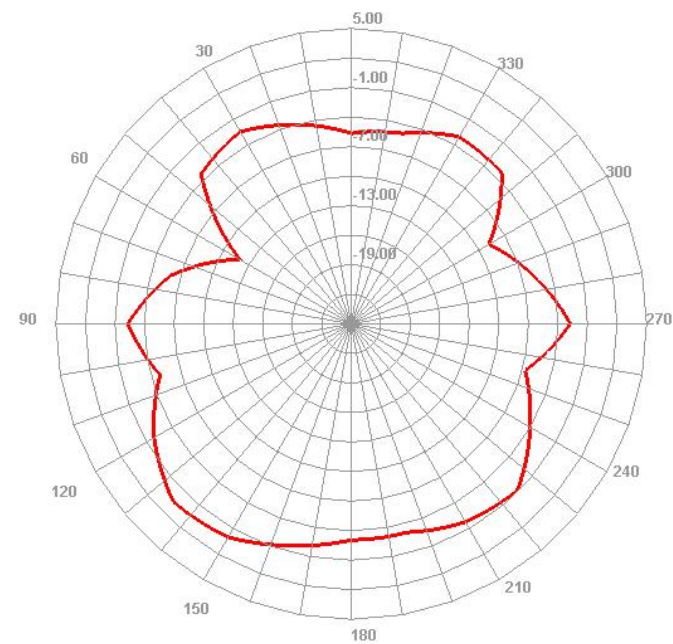
Efficient (LTE.B7 2500~2690Mhz)

2530.000MHz

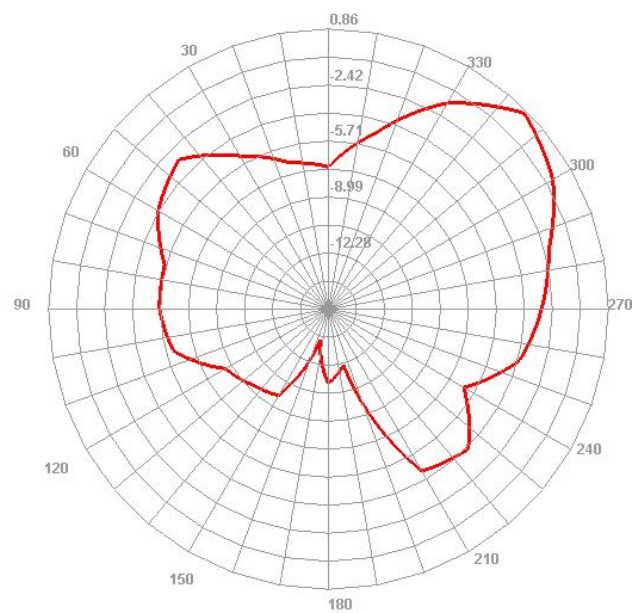


Lower antenna

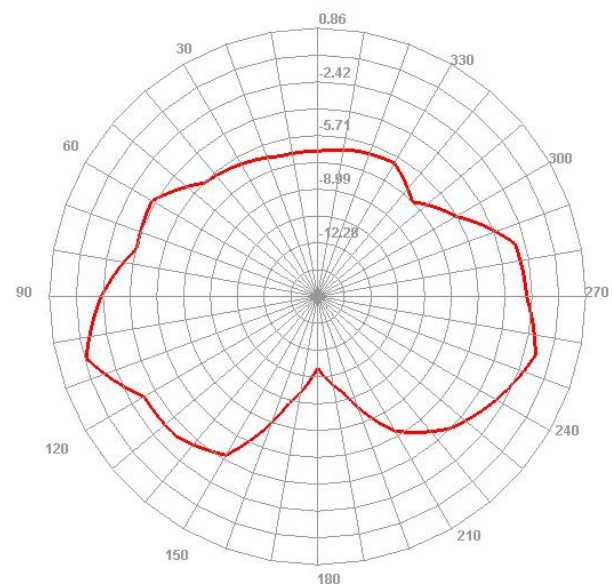
2530.000MHz H



2530.000MHz E1

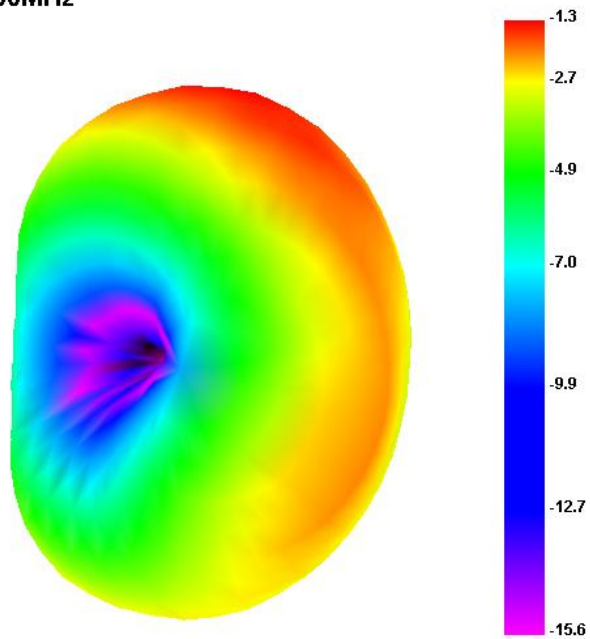


2530.000MHz E2

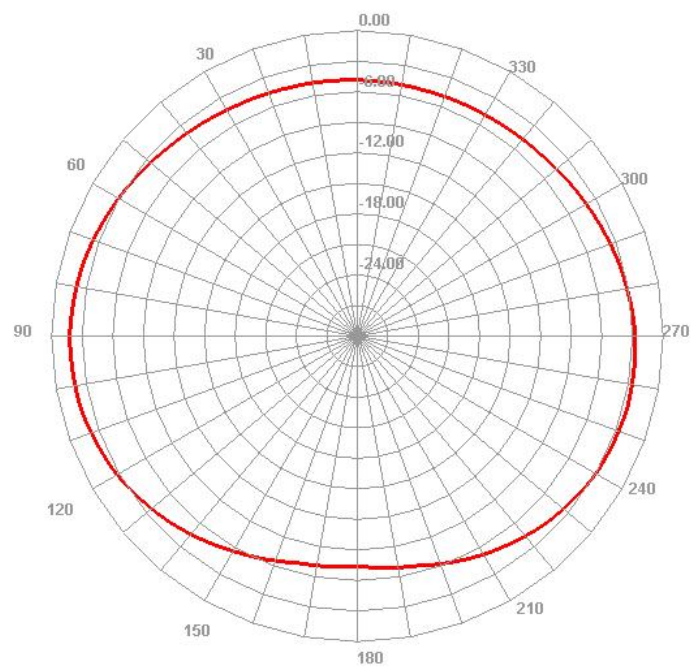


Efficient (LTE:B28 708~798Mhz)

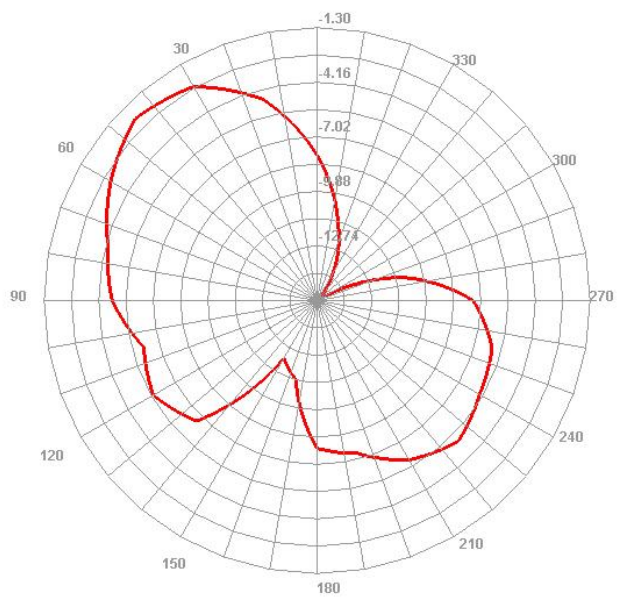
790.000MHz



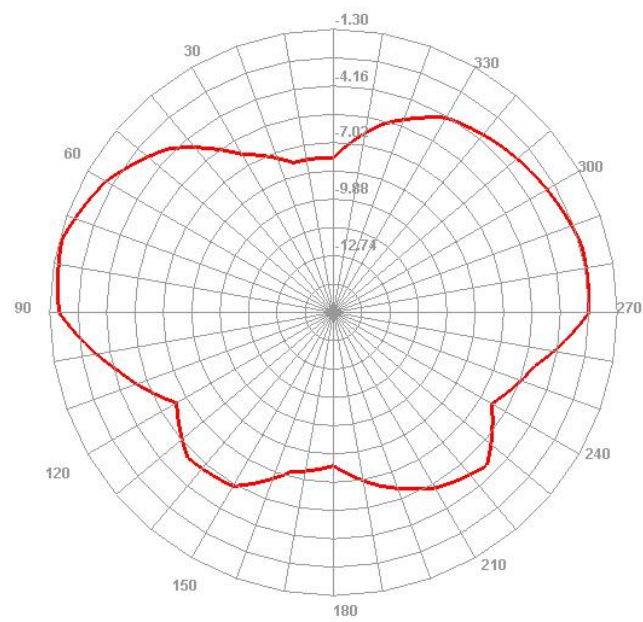
790.000MHz H



790.000MHz E1

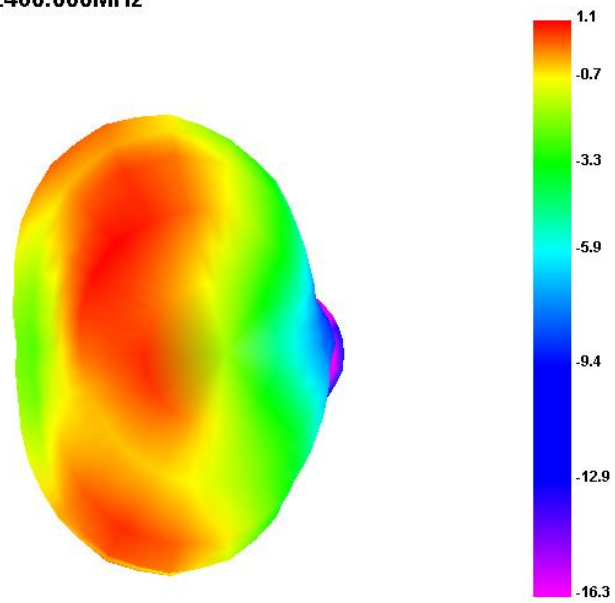


790.000MHz E2

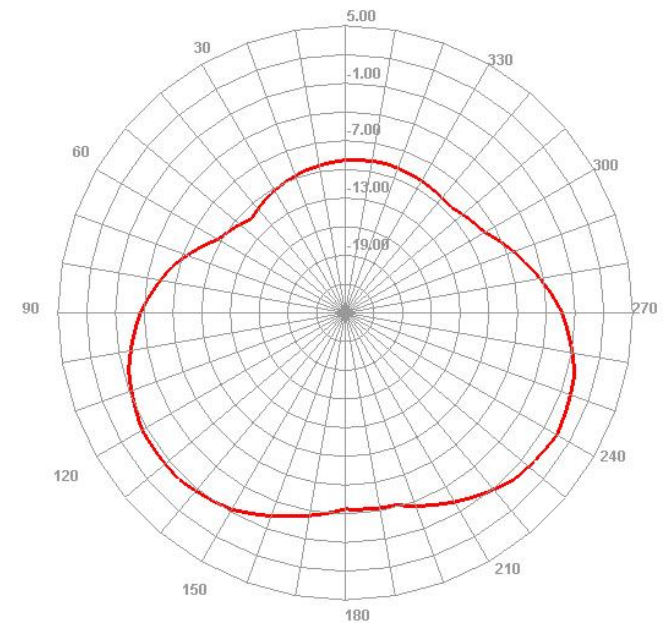


Efficient (2.4GWIFI/BT)

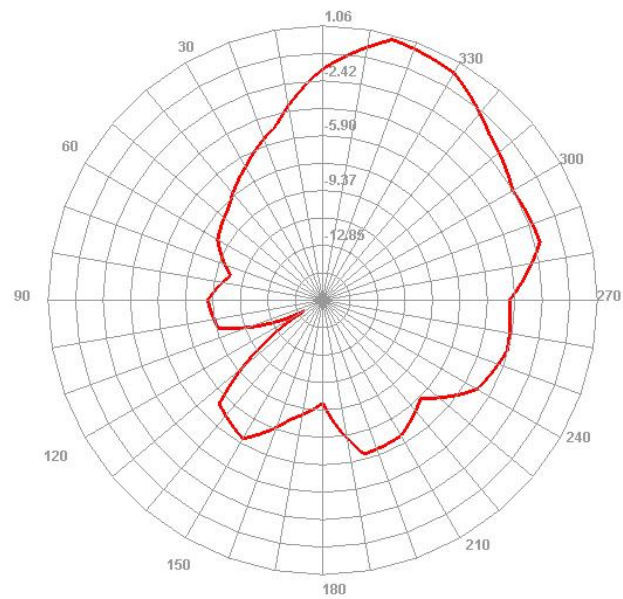
2460.000MHz



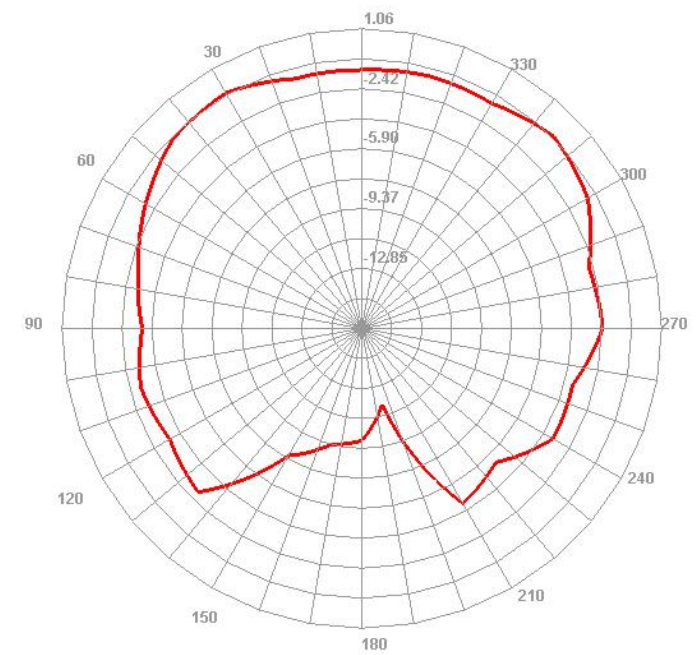
2460.000MHz H



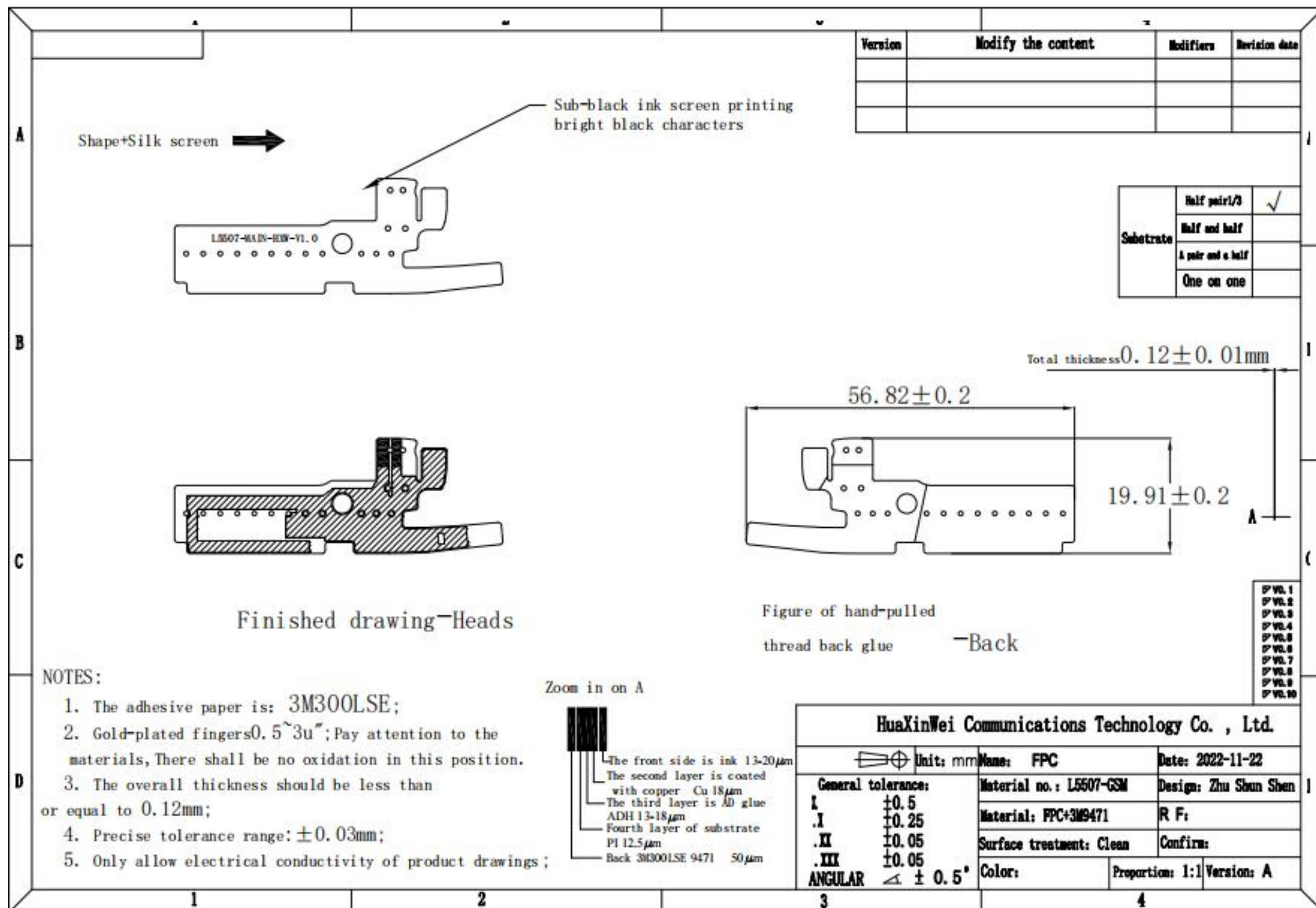
2460.000MHz E1



2460.000MHz E2



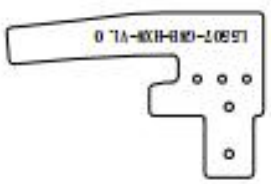
Master antenna specifications



A

Shape+Silk screen

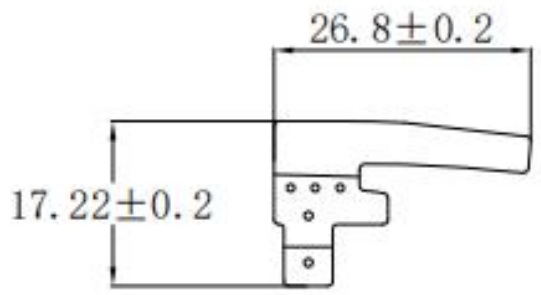
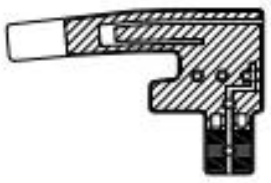
Sub-black ink screen printing
bright black characters



B

C

Finished drawing-Heads



Total thickness 0.12 ± 0.01 mm

A

NOTES:

- 1. The adhesive paper is: 3M300LSE;
- 2. Gold-plated fingers $0.5 \sim 3 \mu$; Pay attention to the materials, There shall be no oxidation in this position.
- 3. The overall thickness should be less than or equal to 0.12mm;
- 4. Precise tolerance range: ± 0.03 mm;
- 5. Only allow electrical conductivity of product drawings;

Zoom in on A



The front side is ink $13 \sim 20 \mu$ m
The second layer is coated with copper $Cu 18 \mu$ m
The third layer is AD glue ADH $13 \sim 18 \mu$ m
Fourth layer of substrate PI 12.5μ m
Back 3M300LSE 9471 50μ m

Version	Modify the content	Modifiers	Revision date

Substrate	Half pair 1/3	✓
	Half and half	
	A pair and a half	
	One on one	

- 07 VOL. 1
- 07 VOL. 2
- 07 VOL. 3
- 07 VOL. 4
- 07 VOL. 5
- 07 VOL. 6
- 07 VOL. 7
- 07 VOL. 8
- 07 VOL. 9
- 07 VOL. 10

D

Figure of hand-pulled
thread back glue -Back

HuaXinWei Communications Technology Co. , Ltd.			
	Unit: mm	Name: FPC	Date: 2022-11-22
General tolerance:		Material no.: L5507-GWB	Design: Zhu Shun Shen
I	± 0.5	Material: FPC+3M9471	R F:
.I	± 0.25	Surface treatment: Clean	Confirm:
.II	± 0.05	Color:	Proportion: 1:1
.III	± 0.05		Version: A
ANGULAR	$\angle \pm 0.5^\circ$		

1

2

3

4

Version	Modify the content	Modifiers	Revision date

Shape+Silk screen →

Sub-black ink screen printing
bright black characters

Substrate	Half pair1/3	Half and half	A pair and a half	One on one
	✓			

Total thickness $0.12 \pm 0.01 \text{ mm}$

19.44 ± 0.2

18.36 ± 0.2

A

Finished drawing-Heads

NOTES:

1. The adhesive paper is: 3M300LSE;
2. Gold-plated fingers $0.5 \sim 3 \mu\text{m}$; Pay attention to the materials, There shall be no oxidation 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 allow electrical conductivity of product drawings;

Zoom in on A

The front side is ink $13 \sim 20 \mu\text{m}$
 The second layer is coated with copper $\text{Cu } 18 \mu\text{m}$
 The third layer is AD glue ADH $13 \sim 18 \mu\text{m}$
 Fourth layer of substrate PI $12.5 \mu\text{m}$
 Back 3M300LSE 9471 $50 \mu\text{m}$

HuaXinWei Communications Technology Co., Ltd.			
Unit: mm	Name: FPC	Date: 2022-11-22	
General tolerance:		Material no.: L5507-DIV	Design: Zhu Shun Shen
I	± 0.5	Material: FPC+3M9471	R F:
.I	± 0.25	Surface treatment: Clean	Confirm:
.II	± 0.05	Color:	Proportion: 1:1
.III	± 0.05	Version: A	
ANGULAR	$\triangle \pm 0.5^\circ$		

SP VOL. 1
 SP VOL. 2
 SP VOL. 3
 SP VOL. 4
 SP VOL. 5
 SP VOL. 6
 SP VOL. 7
 SP VOL. 8
 SP VOL. 9
 SP VOL. 10