Antenna test report

Customer Name: Hua Yue Shi Tong

Project Name: L5507A

Designer: Liu Chun Yun

Date: 2022/11/23

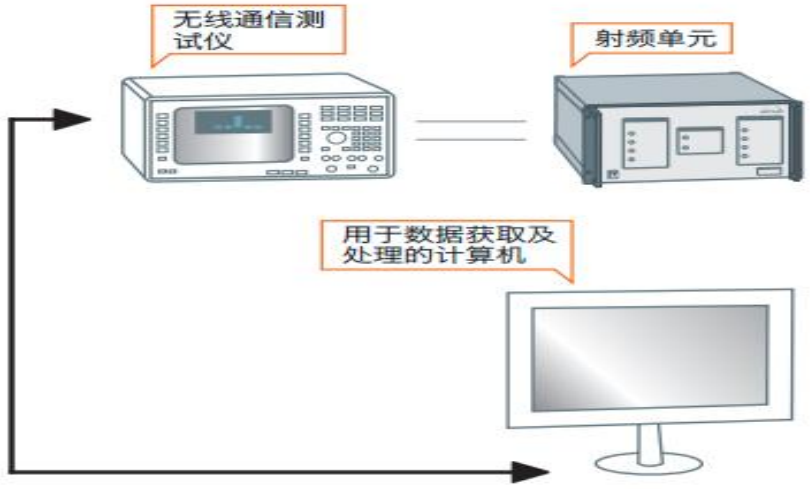
The customer name	Hua Yue Shi Tong	Project Name	**L5507A**

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）

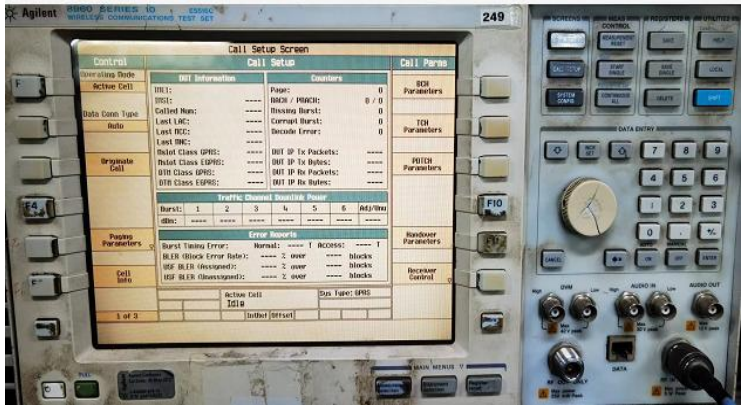
灵敏度算法 \ 标准	GSM GPRS EDGE	CDMA 1 x RTT 1 x EvDO	WCDMA HSDPA LTE FDD/TDD	Wi-Fi 802.11 a/b/g/n	CTIA 批准方法
RSSI模式+线性化+TIS补偿	8 min		10 min		是
EIS模式+TIS补偿		5 min		5 min	是[2]
快速CDMA		8 min			No
EIRP模式+TIS补偿				10 min	No

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

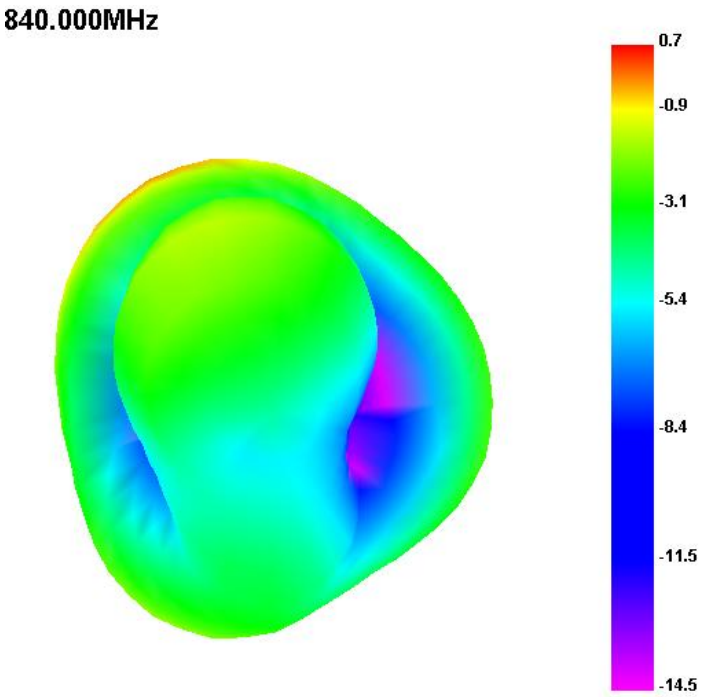
diversity antenna

GPS/WIFI/BT antenna

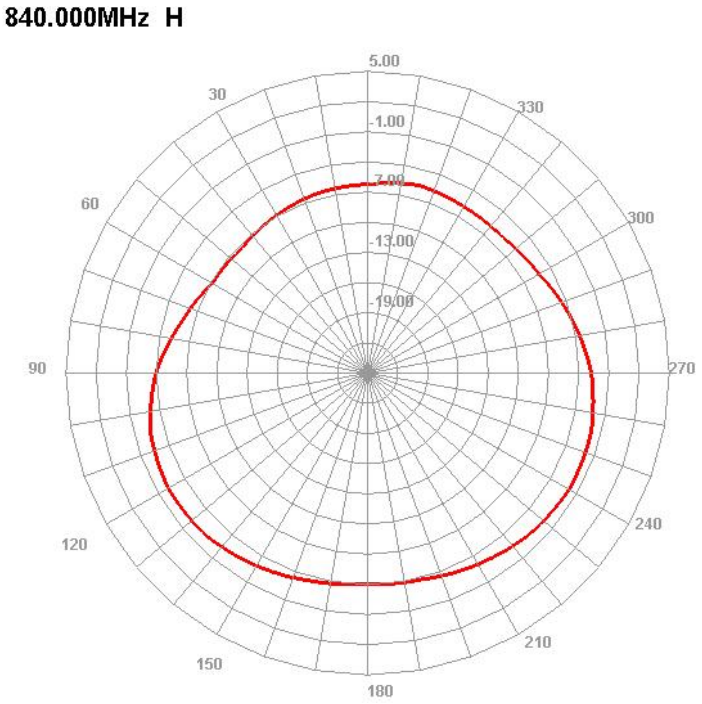
Efficient

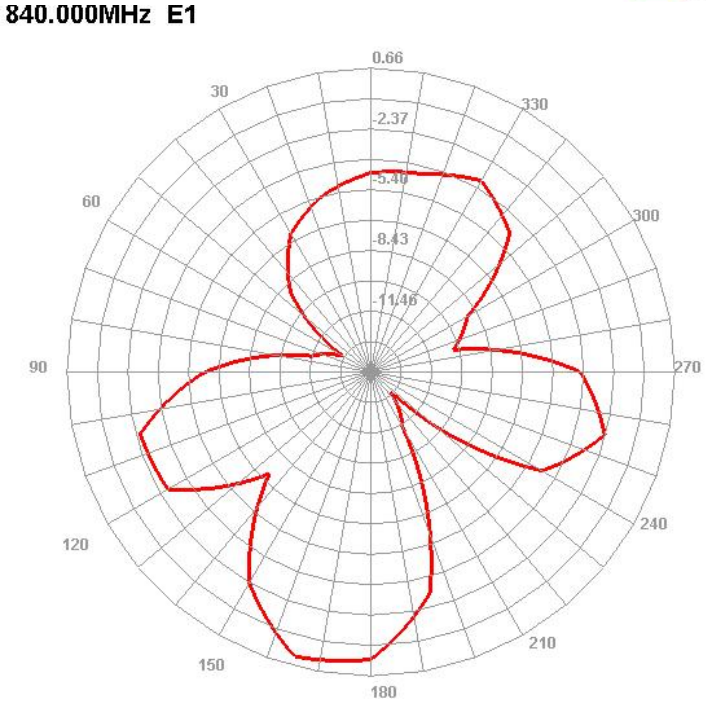
PEAK GAIN		
2G	Frequency range	dbi
GSM850	824~894Mhz	-0.68db
GSM900	880~960Mhz	-0.72db
DCS1800	1710~1880Mhz	+0.92db
PCS1900	1850~1990Mhz	+0.97db
3G		
W1	1920~2170Mhz	+1.03db
W2	1850~1990Mhz	+0.97db
W5	824~894Mhz	-0.68db
W8	880~960Mhz	-0.72db
4G		
LTE-B2	1851~1985Mhz	+0.97db
LTE-B3	1710~1880Mhz	+0.92db
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

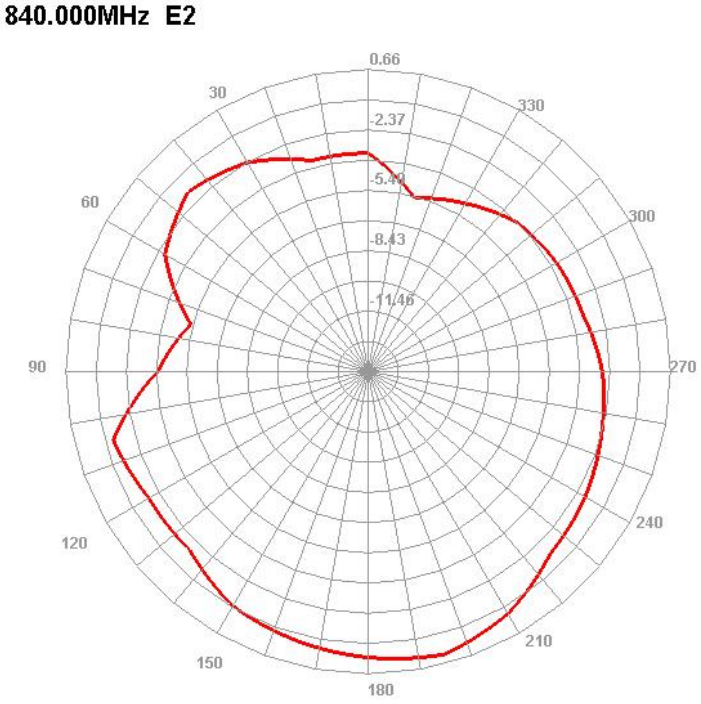
Efficient（GSM850+W5+LTE.B5 824~894Mhz)



Lower antenna



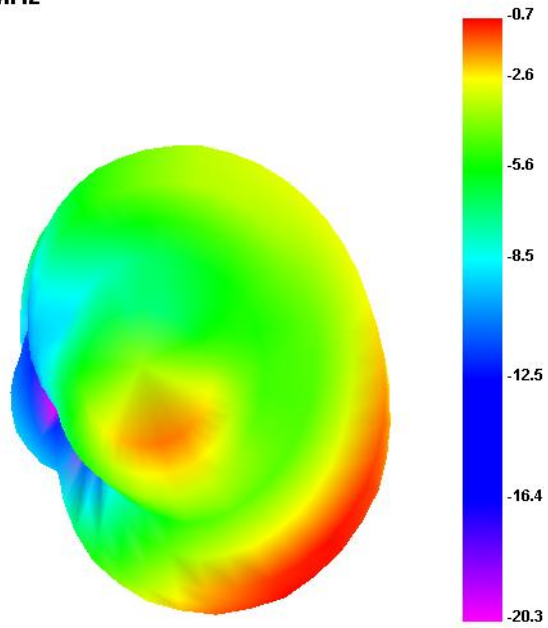




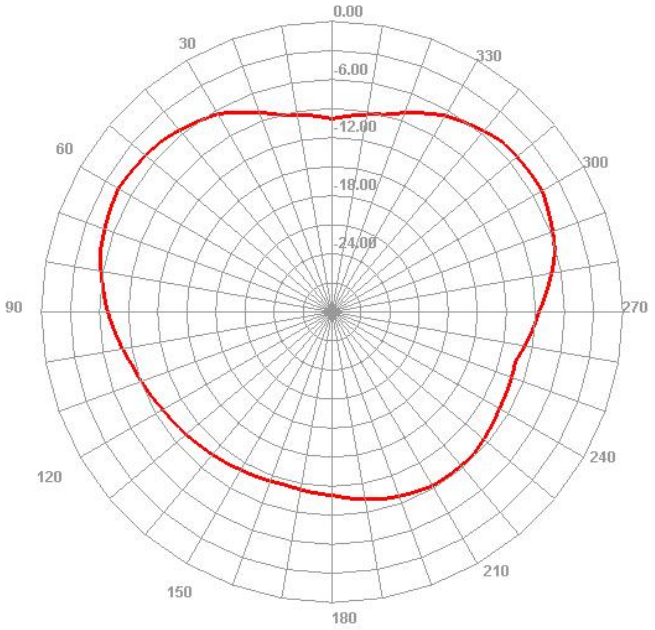
Efficient（GSM900+W8 880~960Mhz)

Lower antenna

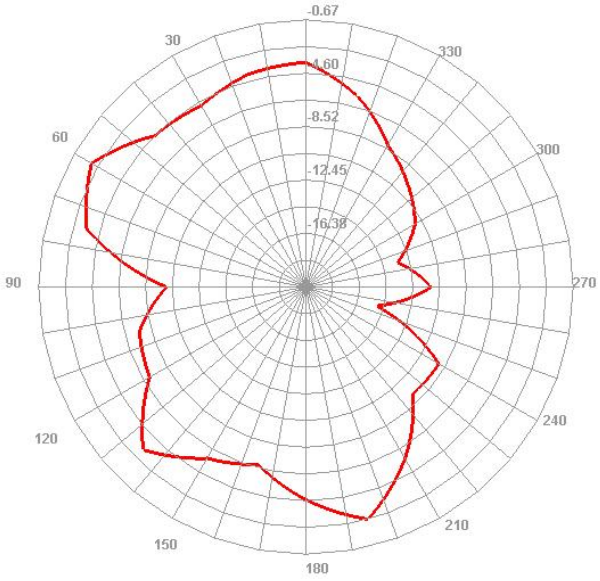
950.000MHz



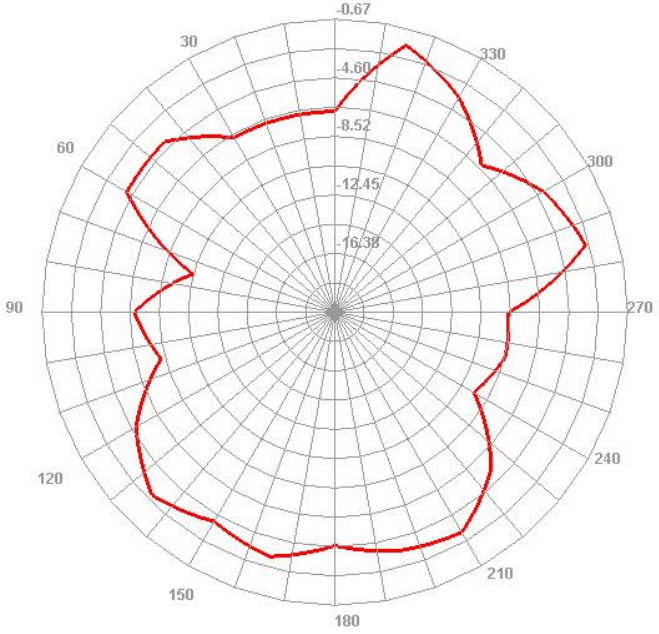
950.000MHz H



950.000MHz E1



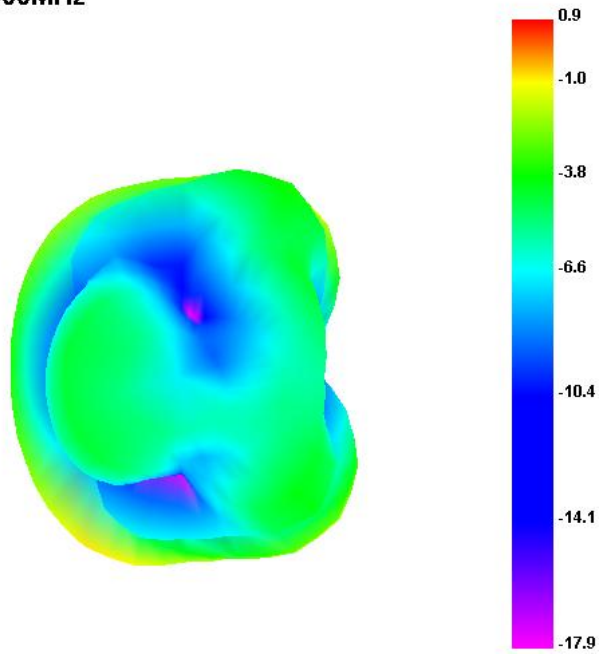
950.000MHz E2



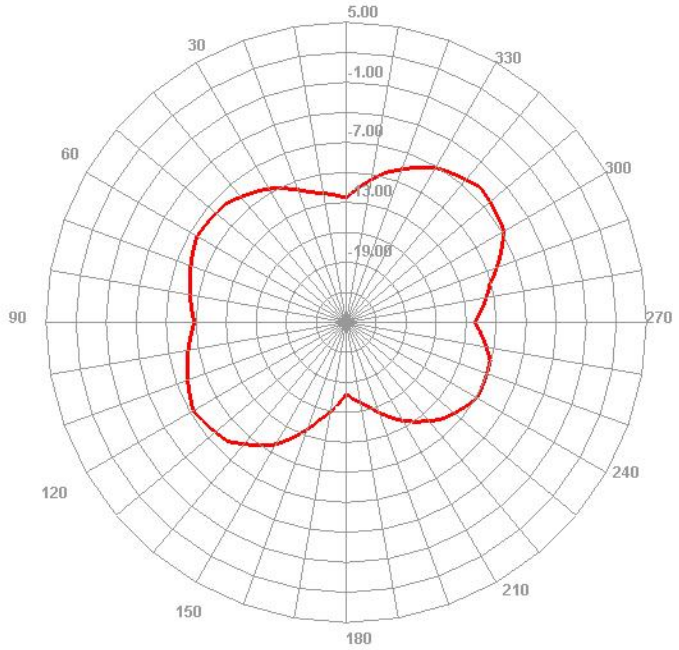
Efficient（GSM1800+LTE.B3 1710~1880Mhz)

Lower antenna

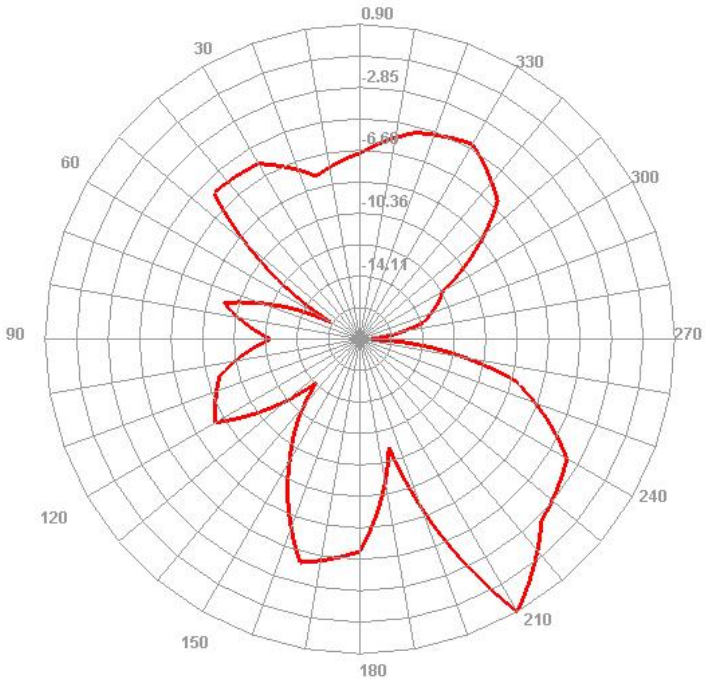
1720.000MHz



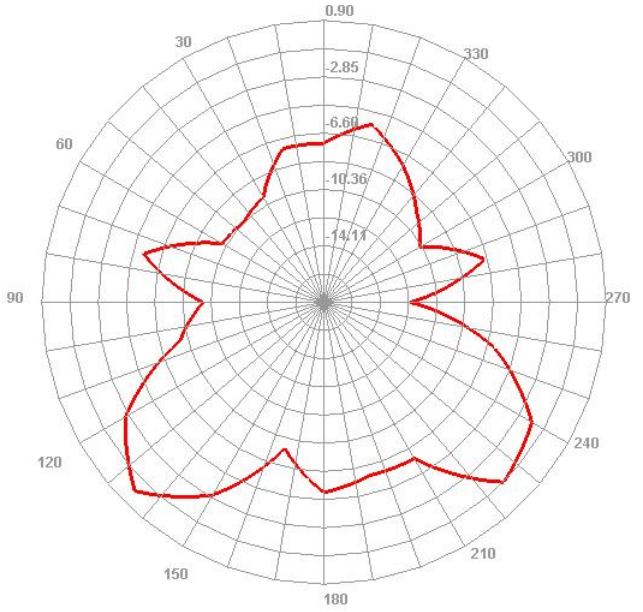
1720.000MHz H



1720.000MHz E1



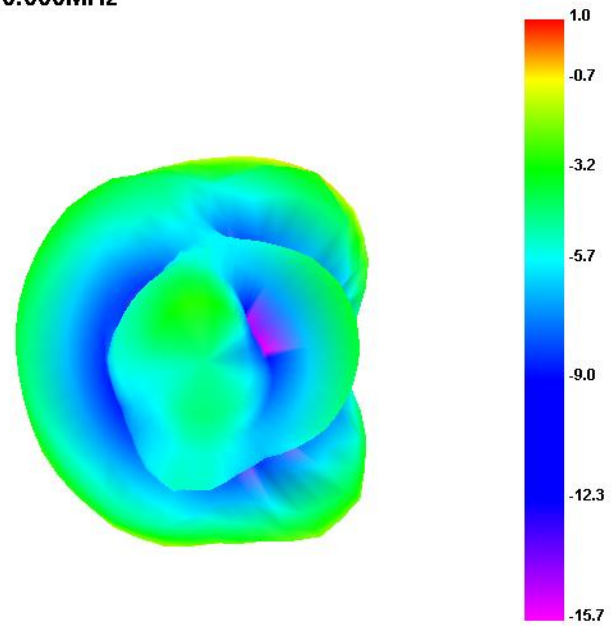
1720.000MHz E2



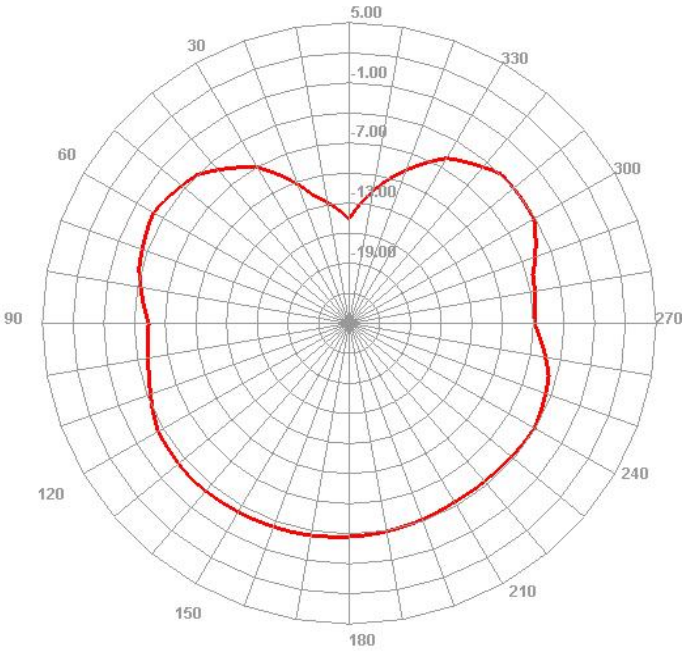
Efficient（GSM1900+W2+LTE.B2 1850~1990MH

Lower antenna

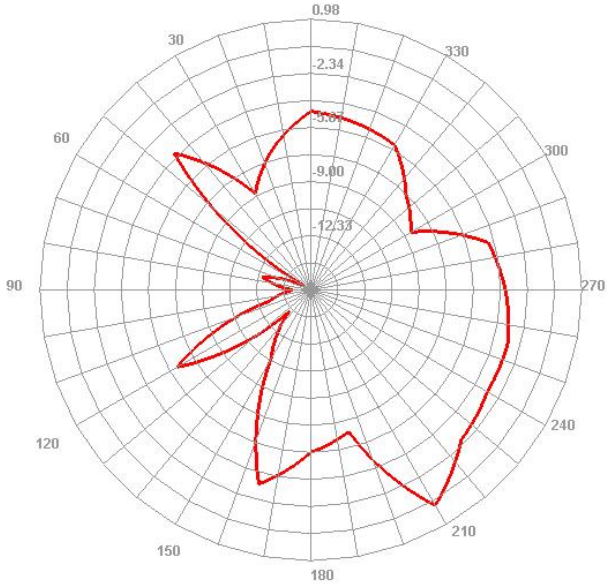
1910.000MHz



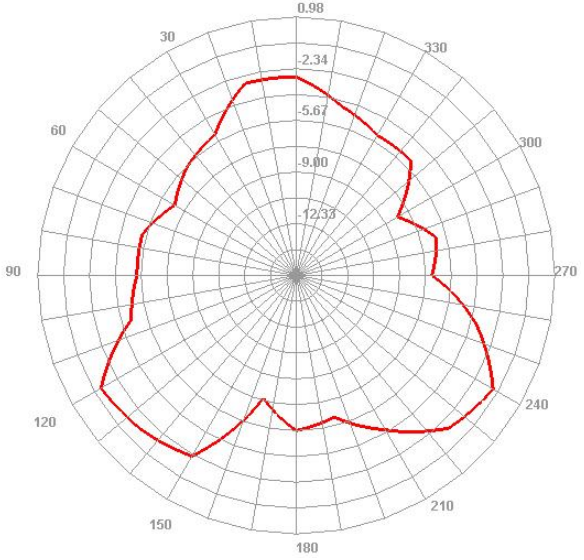
1910.000MHz H



1910.000MHz E1



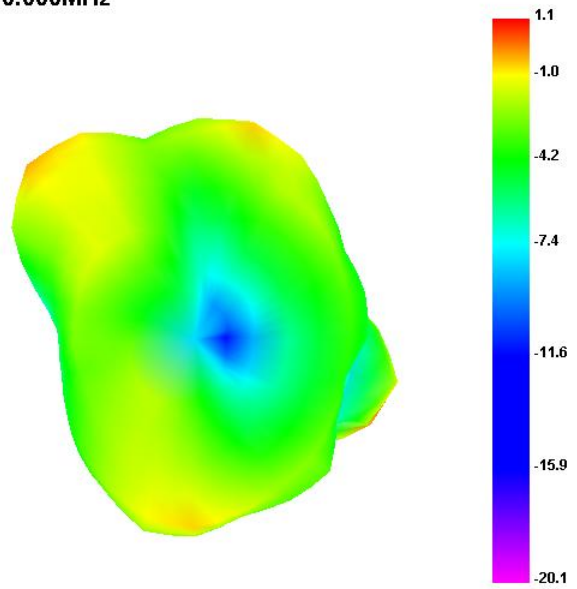
1910.000MHz E2



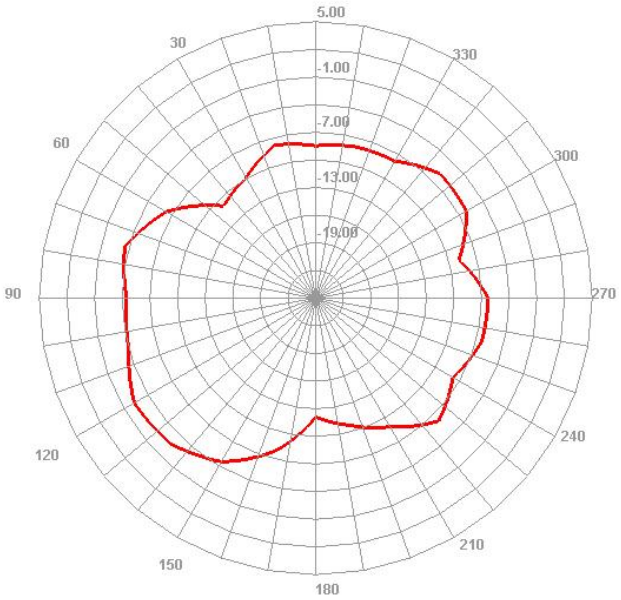
Efficient（W1 1920~2170Mhz)

Lower antenna

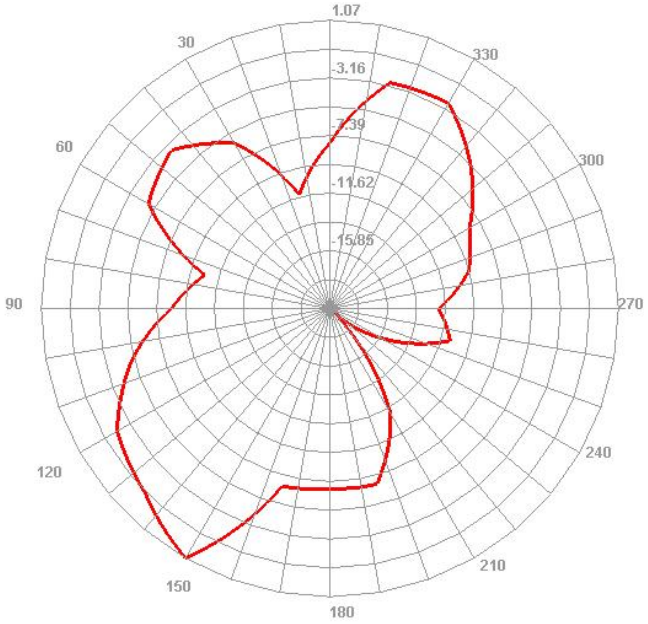
2010.000MHz



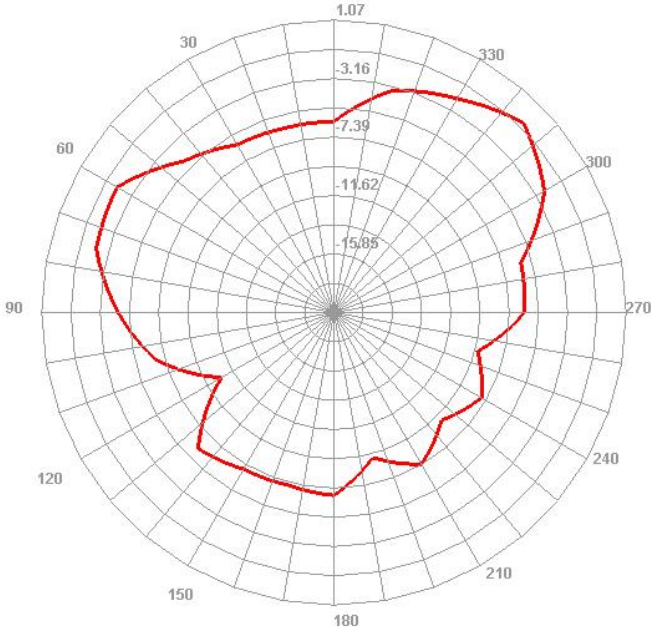
2010.000MHz H



2010.000MHz E1



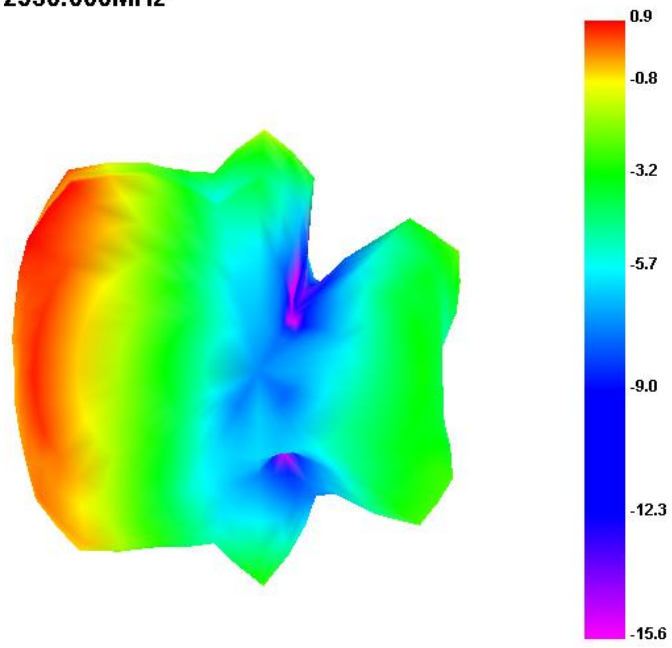
2010.000MHz E2



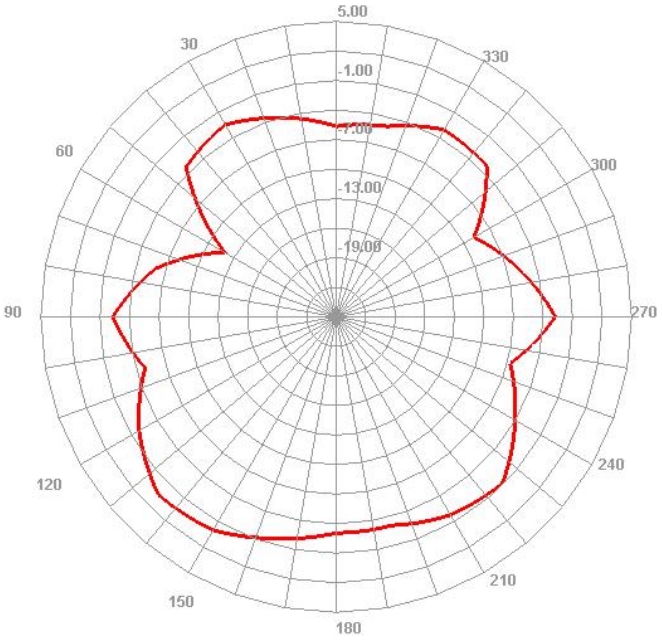
Efficient（LTE.B7 2500~2690Mhz)

Lower antenna

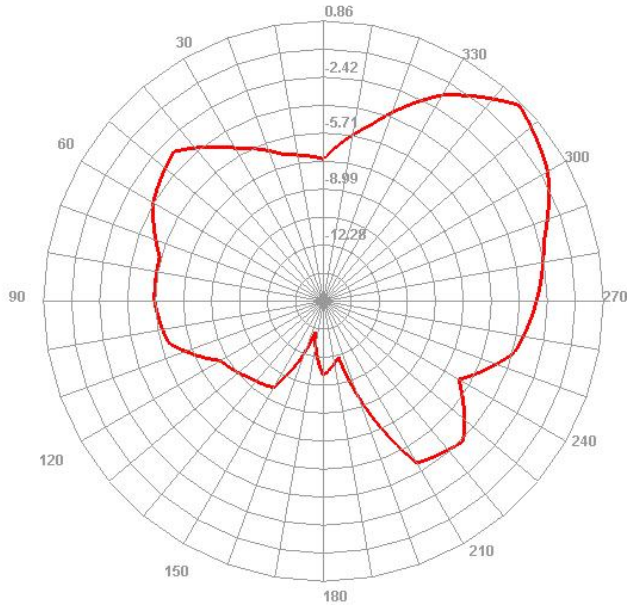
2530.000MHz



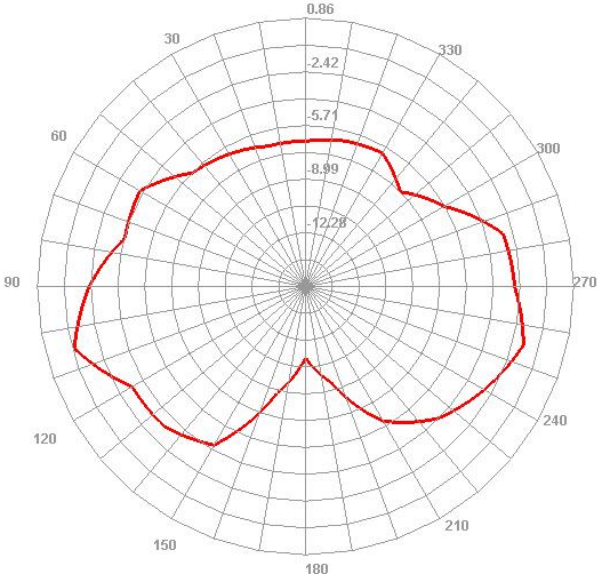
2530.000MHz H



2530.000MHz E1

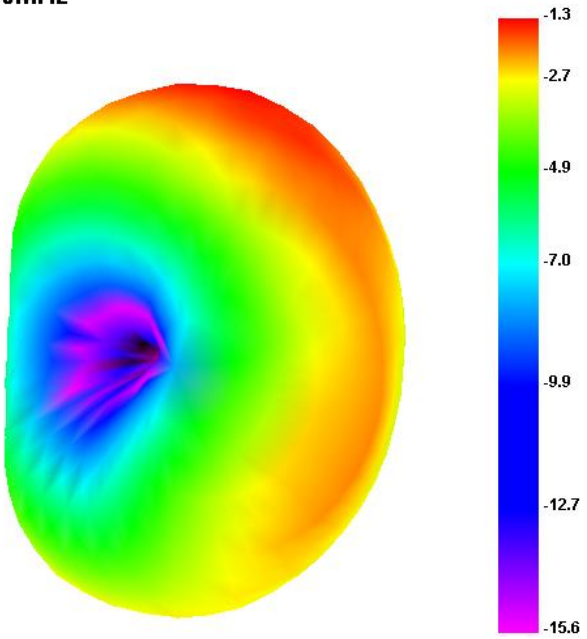


2530.000MHz E2

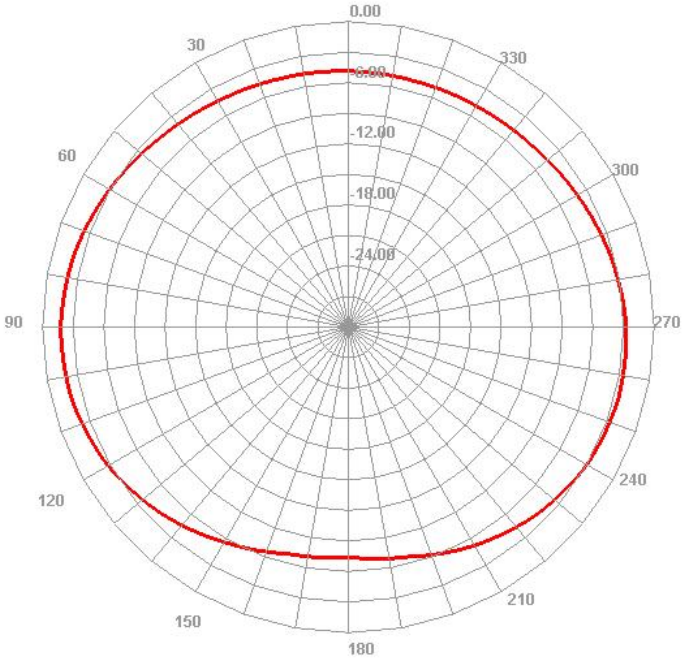


Efficient（LTE:B28 708~798Mhz ）

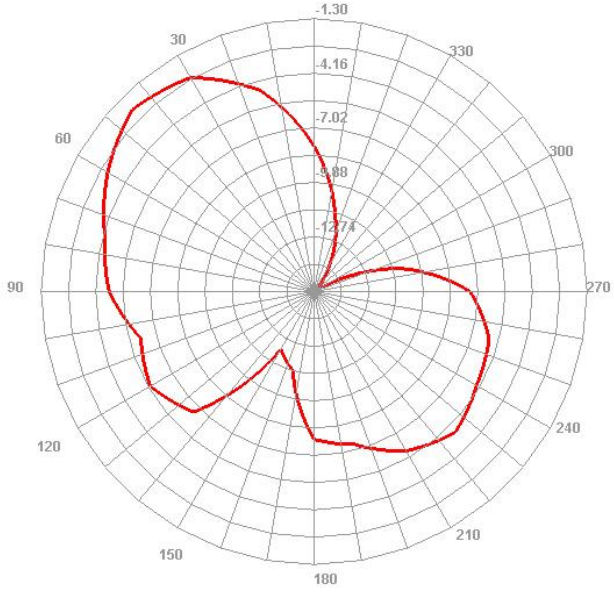
790.000MHz



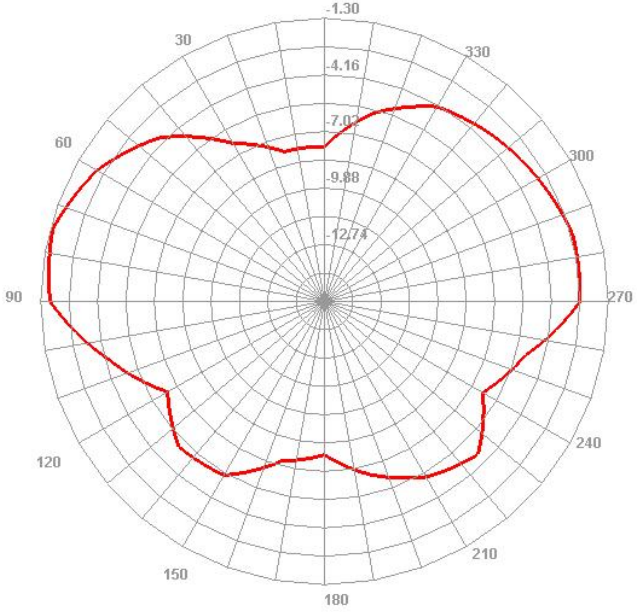
790.000MHz H



790.000MHz E1

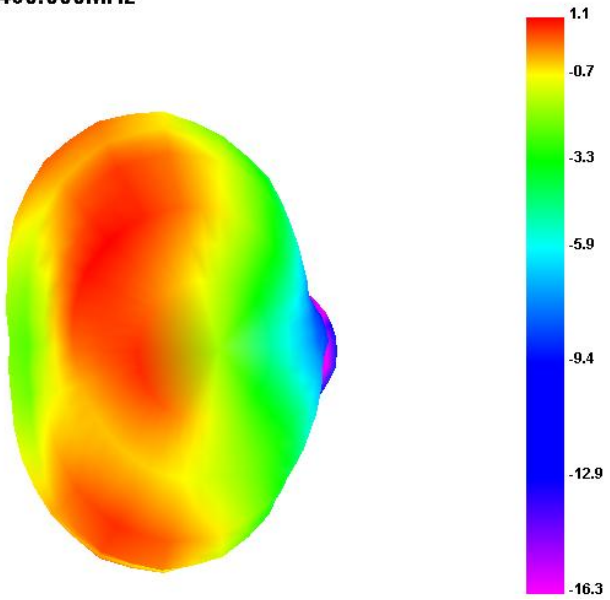


790.000MHz E2

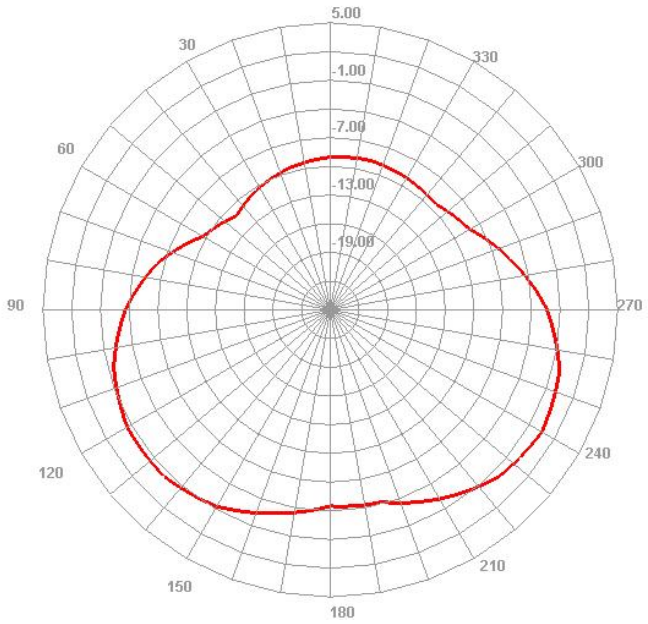


Efficient（2.4GWIFI/BT)

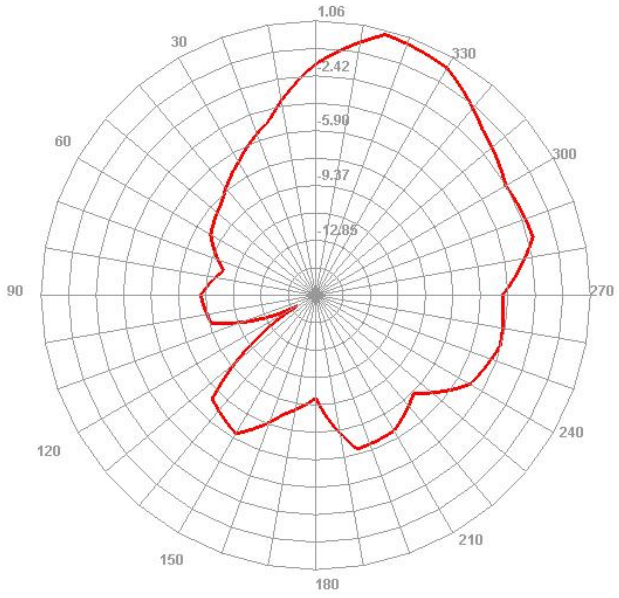
2460.000MHz



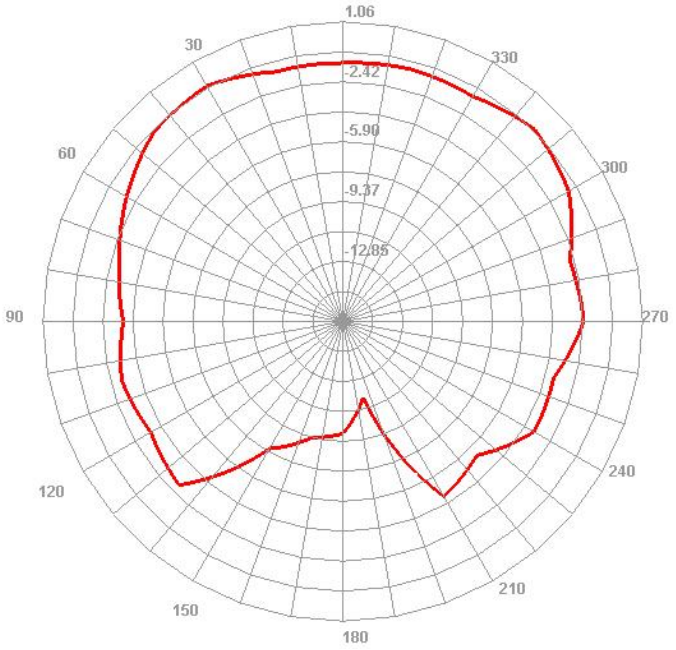
2460.000MHz H



2460.000MHz E1



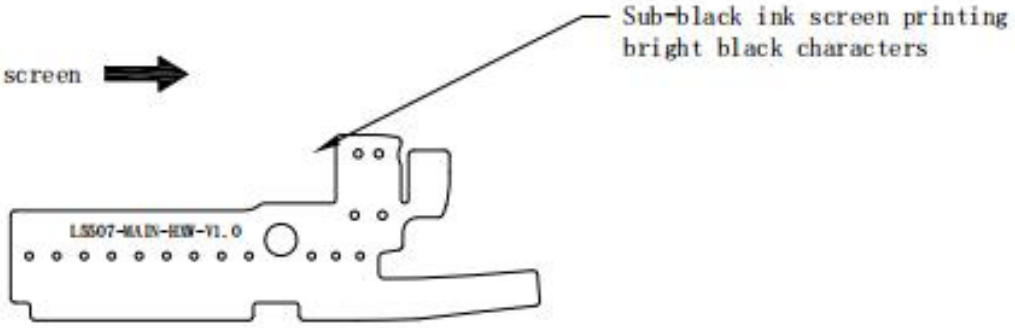
2460.000MHz E2



Master antenna specifications

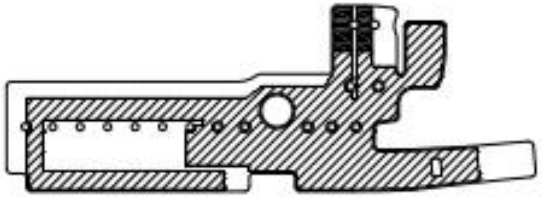
Version	Modify the content	Modifiers	Revision date

Shape+Silk screen



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

Total thickness 0.12±0.01mm



Finished drawing-Heads

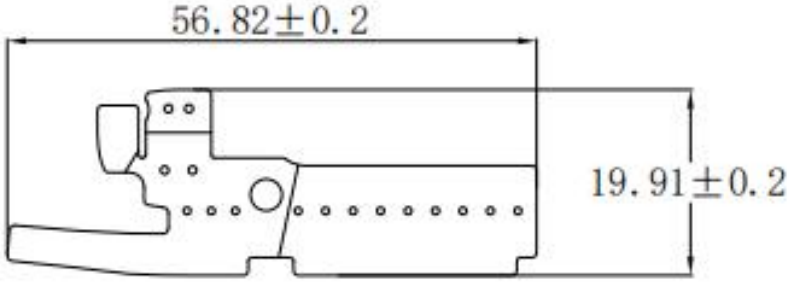


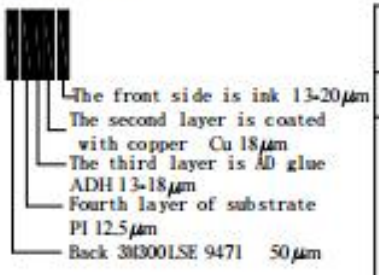
Figure of hand-pulled thread back glue -Back

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

NOTES:

1. The adhesive paper is: 3M300LSE;
2. Gold-plated fingers0.5~3u"; 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: ±0.03mm;
5. Only allow electrical conductivity of product drawings;

Zoom in on A



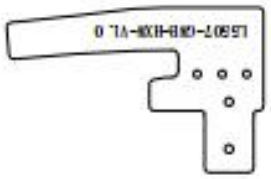
HuaXinWei Communications Technology Co., Ltd.			
Unit: mm	Name: FPC		Date: 2022-11-22
General tolerance:	Material no.: L5507-GSM		Design: Zhu Shun Shen
I ±0.5	Material: FPC+3M9471		R F:
.I ±0.25	Surface treatment: Clean		Confirm:
.II ±0.05			
.III ±0.05	Color:	Proportion: 1:1	Version: A
ANGULAR ∠ ± 0.5°			

GPS/WIFI/BT Specifications

Version	Modify the content	Modifiers	Revision date

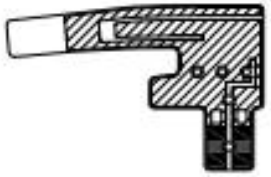
Shape+Silk screen

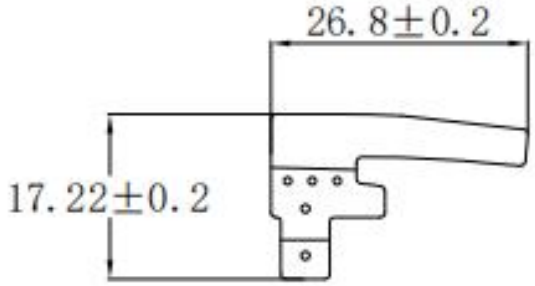
Sub-black ink screen printing bright black characters



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

Total thickness 0.12±0.01mm





A

Finished drawing-Heads

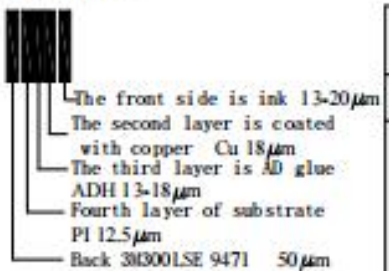
Figure of hand-pulled thread back glue -Back

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

NOTES:

1. The adhesive paper is: 3M300LSE;
2. Gold-plated fingers0.5~3u"; 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: ±0.03mm;
5. Only allow electrical conductivity of product drawings;

Zoom in on A



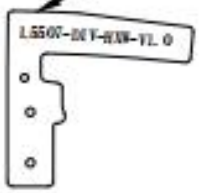
HuaXinWei Communications Technology Co. , Ltd.			
Unit: mm	Name: FPC		Date: 2022-11-22
General tolerance:	Material no.: L5507-GWB		Design: Zhu Shun Shen
I ±0.5	Material: FPC+3M9471		R F:
.I ±0.25	Surface treatment: Clean		Confirm:
.II ±0.05	Color:	Proportion: 1:1	Version: A
.III ±0.05			
ANGULAR ∠ ±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

Diversity antenna specifications

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±0.01mm

19.44±0.2

18.36±0.2

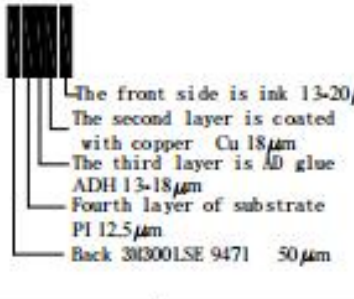
A

Finished drawing-Heads

NOTES:

1. The adhesive paper is: 3M300LSE;
2. Gold-plated fingers0.5~3u"; 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: ±0.03mm;
5. Only allow electrical conductivity of product drawings;

Zoom in on A



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 Version: A
.III	±0.05		
ANGULAR	∠ ± 0.5°		

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