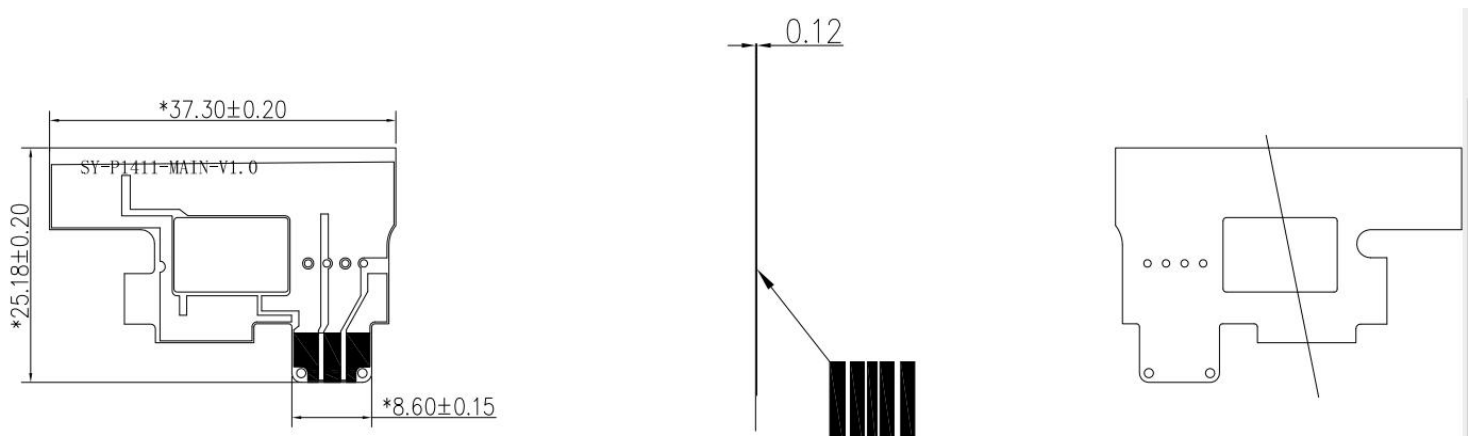


Main antenna specification

General information

Manufacturer	Sunnyway Technology (China) Co.,Ltd.
Model Name	P1411-main ant
Date	2025.4.25
Version	1.0
Vendor address	1F,Building 4,No.99,Lane 215,GaoGuang Road, QingPu District, 201702 Shanghai,China

Antenna Appearance



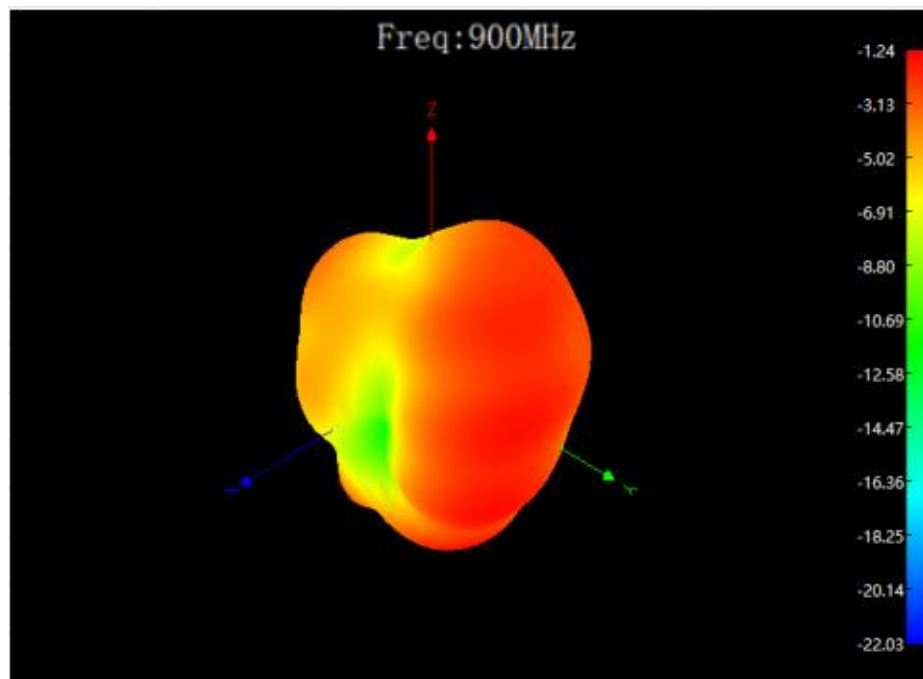
Technical Specifications

Frequency Range	700MHZ-960MHZ+1710MHZ-2690MHZ
Antenna Type	IFA
Dimensions	38.61*27.33mm
Impedance	50 ohm
Maximum Gain	2.33dBi
VSWR	≤ 3
.....	

Efficiency and gain

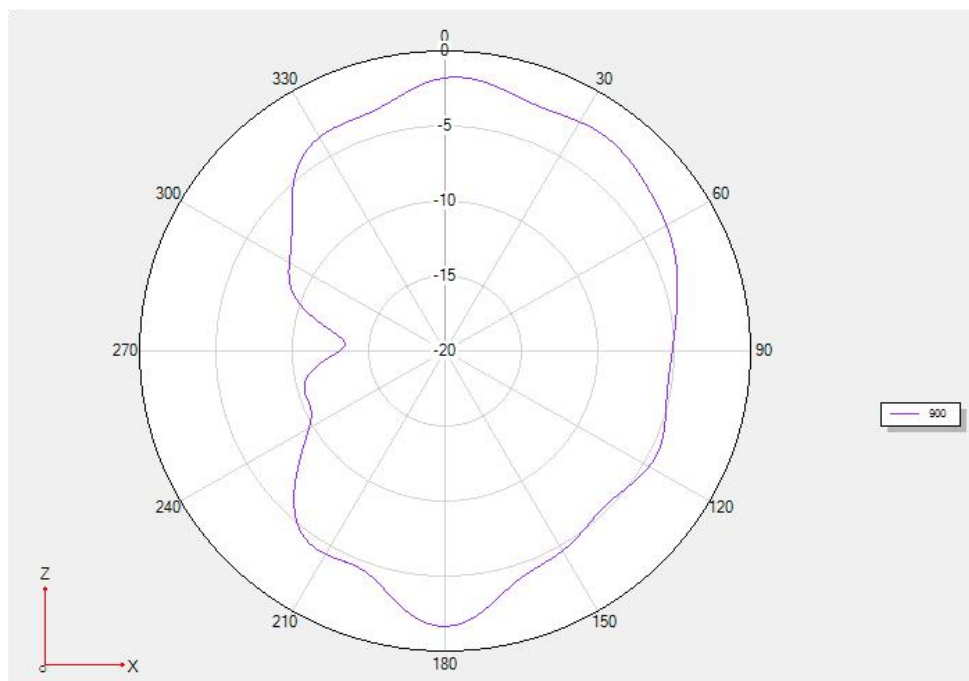
Frequency (MHz)	Gain(dBi)	Efficiency(%)	Frequency (MHz)	Gain(dBi)	Efficiency(%)
700	-2.02	18.41	1700	1.94	36.11
750	-1.96	20.66	1750	1.88	36.04
800	-0.3	30.41	1800	2.33	38.83
850	-0.6	28.66	1850	1.66	34.98
900	-1.24	25.49	1900	2.31	37.51
950	-1.71	20.17	1950	2.22	35.89
1000	-2	19.84	2000	1.99	36.88
			2050	1.89	36.98
			2100	1.96	37.21
			2150	1.33	36.41
			2200	1.63	36.66
			2250	1.59	33.58
			2300	1.97	33.66
			2350	2.19	32.17
			2400	2.03	36.99
			2450	1.99	38.89
			2500	1.6	35.41
			2550	1.71	33.33
			2600	1.7	31.89
			2650	1.93	30.99
			2700	1.7	30.14

Free space 3D radiation pattern

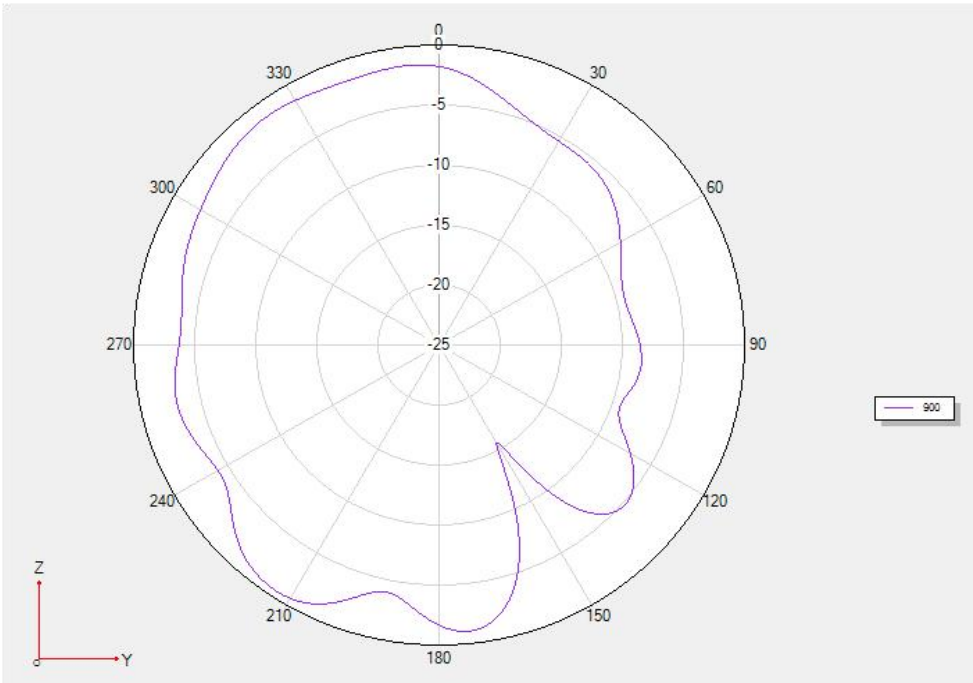


Free space 2D radiation pattern

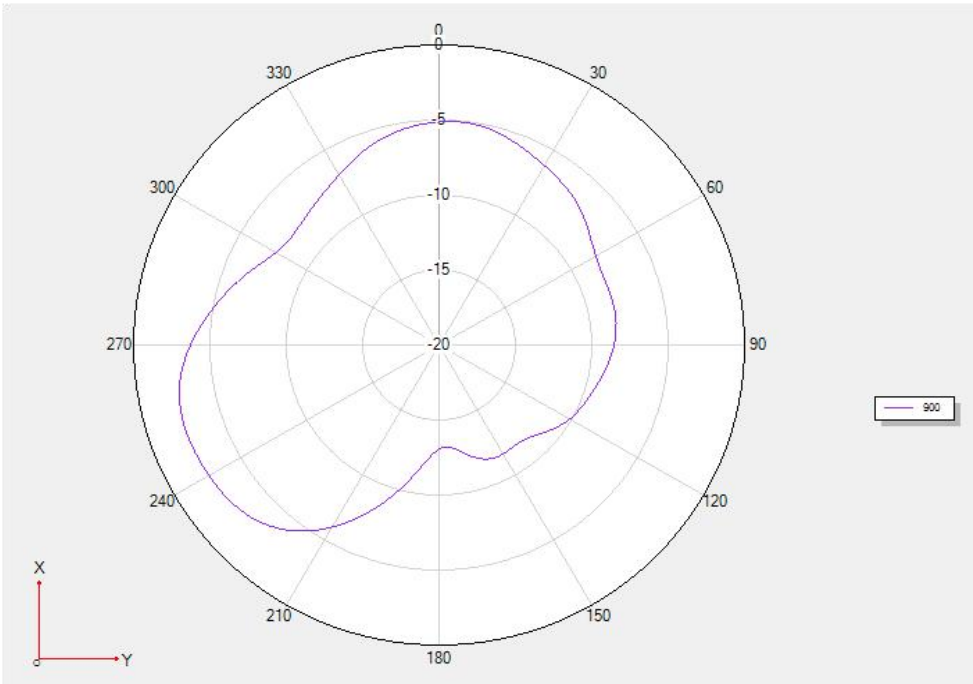
Phi 0



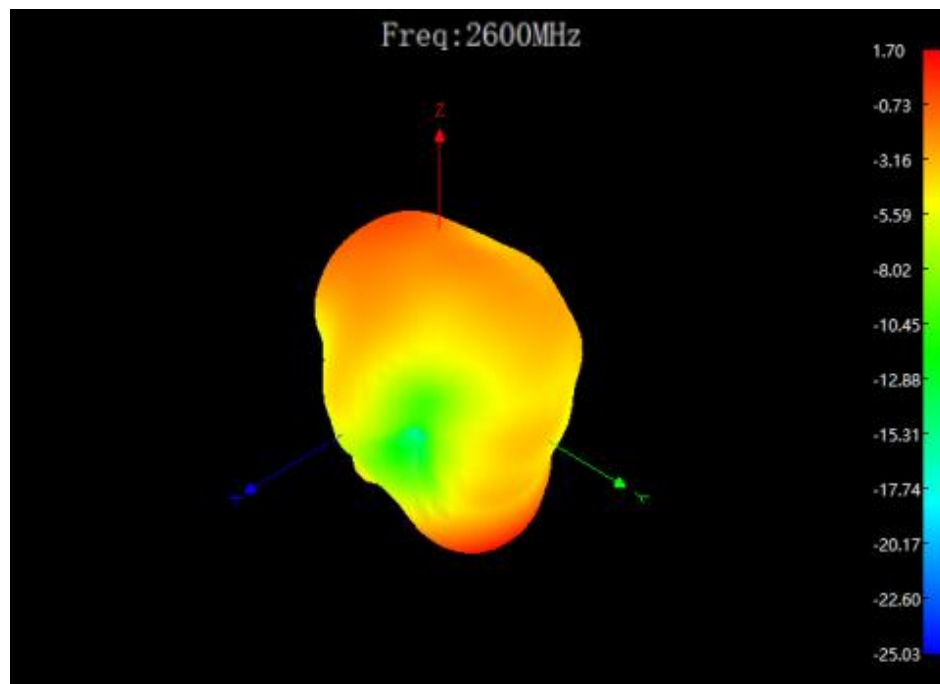
Phi 90



Theat 90

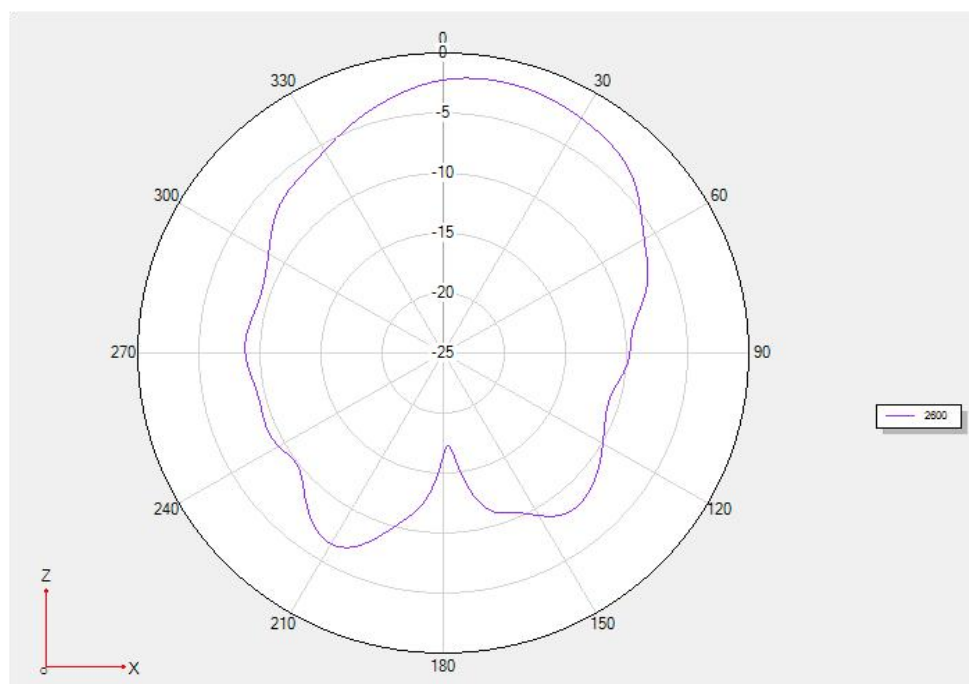


Free space 3D radiation pattern

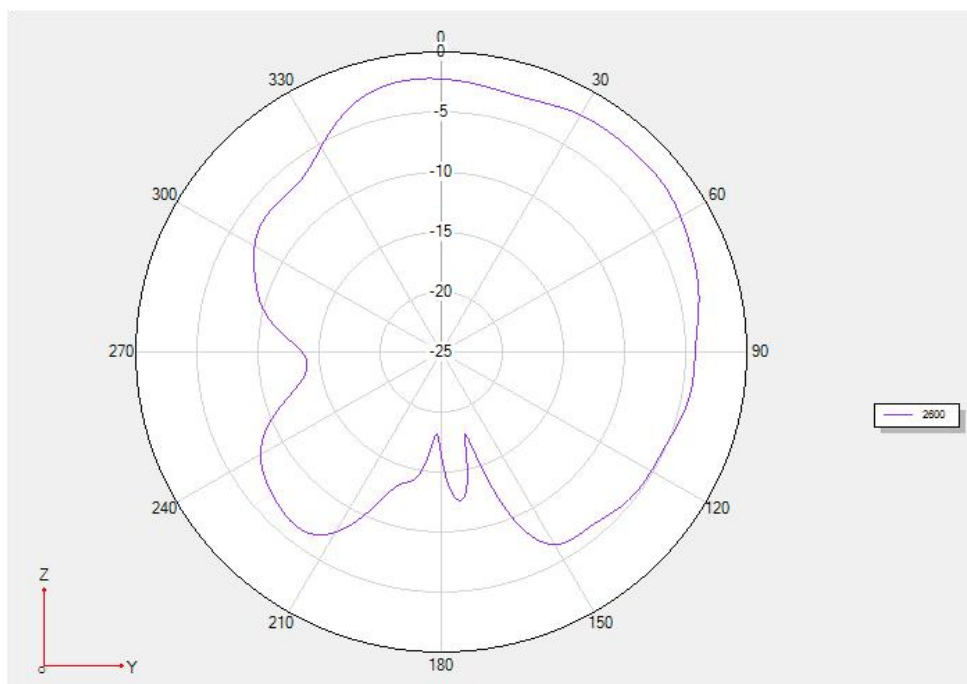


Free space 2D radiation pattern

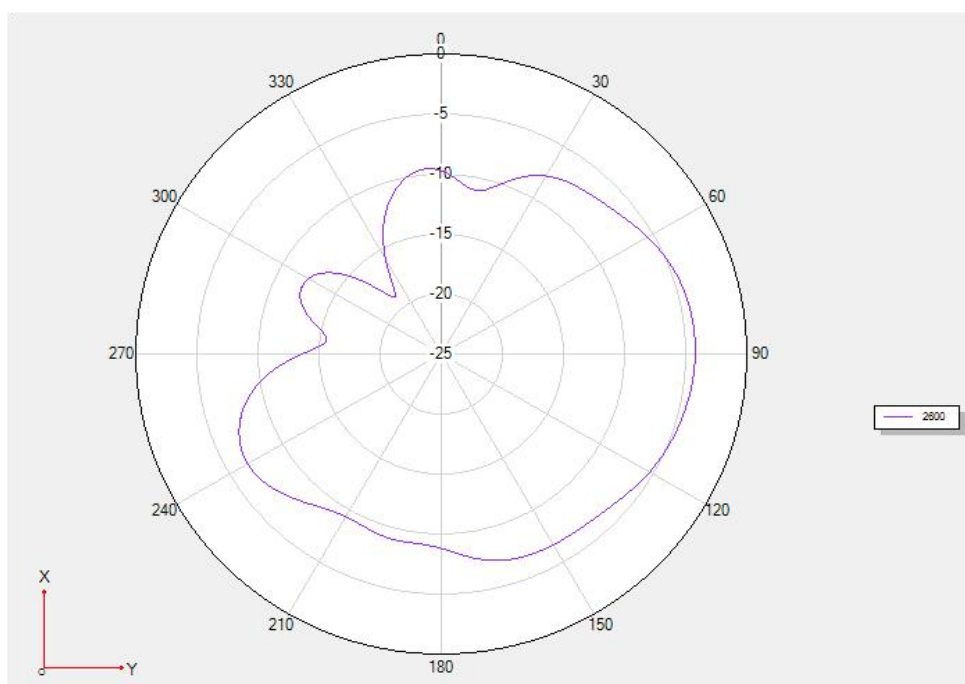
Phi 0



Phi 90



Theat 90



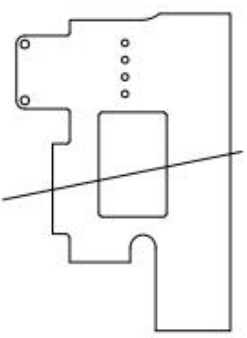
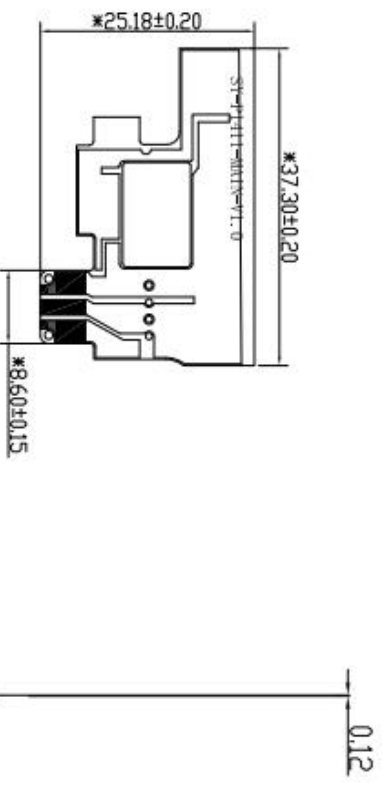
OTA (TRP TIS)

Band	Channel	TRP (dBm)	TIS (dBm)
GSM850	128	26.03	
	190	26.56	
	251	26.85	-101.73
GSM900	975	26.48	
	38	26.42	
	124	25.53	-101.09
GSM1800	512	25.58	
	698	25.5	
	885	25.08	-104.05
GSM1900	512	25.19	
	661	25.79	
	810	25.16	-104.14

WCDMA-B1	9612	18.05	
	9750	18.53	
	9888	18.5	-104.71
WCDMA-B2	9662	18.53	
	9800	18.11	
	9938	18.04	-104.44
WCDMA-B4	1537	18.67	
	1638	18.71	
	1738	18.39	-104.27
WCDMA-B5	4387	17.42	
	4400	17.38	
	4413	17.05	-103.02
WCDMA-B8	2712	17.49	
	2788	17.21	
	2863	16.82	-103.27

LTE-B1	18050	18.31	
	18300	18.81	
	18550	18.69	-92.25
LTE-B2	18650	18.62	
	18900	18.47	
	19150	18.41	-93.22
LTE-B3	19250	18.77	
	19575	18.57	
	19900	18.17	-94.25

LTE-B4	20000	18.32	
	20175	18.41	
	20350	18.59	-93.26
LTE-B5	20450	16.85	
	20525	17.07	
	20600	17	-90.55
LTE-B7	20800	19.51	
	21100	19.33	
	21400	19.29	-93.37
LTE-B12	23060	15.66	
	23095	16.42	
	23130	16.52	-88.78
LTE-B17	23780	15.61	
	23790	16.12	
	23800	16.25	-88.94
LTE-B25	26090	18.61	
	26365	18.44	
	26640	18.6	-92.47
LTE-B26	26740	17.15	
	26865	17.53	
	26990	17.17	-91.02
LTE-B28	27260	15.97	
	27435	16.36	
	27610	16.18	-88.71
LTE-B38	37850	18.55	
	38000	19.21	
	38150	19.43	-90.28
LTE-B41	40340	18.83	
	40740	18.93	
	41140	18.83	-90.16



technical requirement

- B**
- Shipping packaging requirements: (Single PCS packaging for shipment)
 - Black ink on the surface of copper paste;
 - The ink should be uniform;
 - Sizes marked with “*” are the key dimensions;
 - Use TESA 68905 for adhesive backing;
 - The substrate uses PI T=1Ml;
 - Copper foil thickness of 0.5oz;
 - Gold plating with a thickness of 0.5 microns, 24-hour salt spray;
 - The unmarked rounded corners are all 0.2, and the process edge is 0.2mm;
 - For unmarked tolerances, follow the general tolerance table;
 - The product meets ROHS2.0 requirements.
- A**

Sunnyway Technology (China) Co., Ltd.

	PART NAME: P1411		DATE: 2024.1.18	
	PART NO: SH232961B75-1		DRAWN: Yujiang	
	RF:		Tel:	
	PM:		Tel:	
	MATERIAL:		CHECKED:	
FINISHING:		APPROVED:		
UNIT:mm	COLOR:	SCALE:1:1	REV:TEST:A	

TOLERANCE
X, X ±0.25
. XX ±0.20
. XXX ±0.05
ANGULAR <±0.5°