

SPEED TECHNOLOGY

SPEED Communication Technology Limited

Approval sheet of 6301-TX Internal Antenna

Customer/Project	6301-TX	Frequency Band	2.4G		
SCT P/N	SS10013206	Version	S01		
Date	2023-10-26				
Material Code	F-0A-N2-0002-000-K0				
SPEED					
Checked by	RF	ERICGUO	Design by	RF	李正权
	ME	ERICGUO		ME	邱宏
	QC	姜春梅	Remark		
Customer					
Date					
Confirmed by	RF				
	ME				
Remark					

www.speed-hz.com

SPEED has possession of proprietary information provided in this presentation and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SPEED Communication Technology.

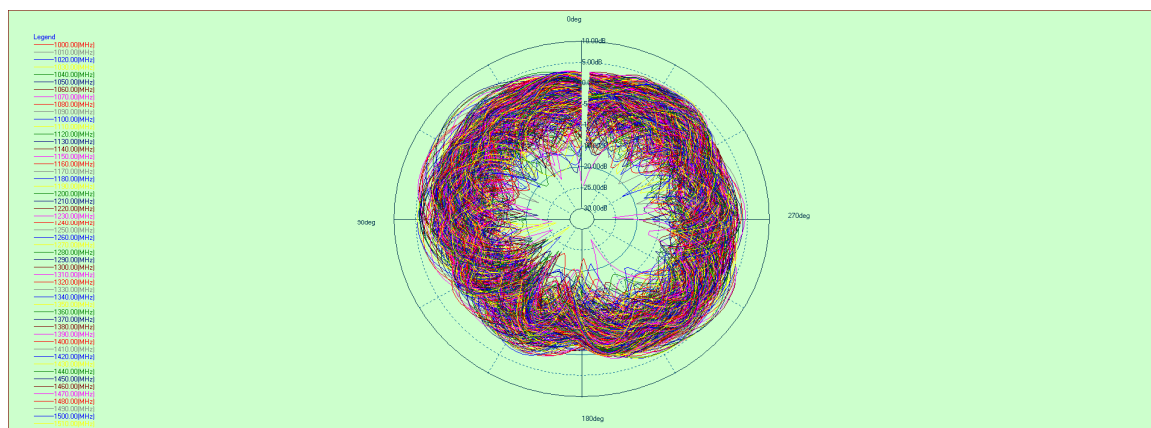
1、 Gain & Radiation Patterns

The gain and efficiency of the antenna was measured in the anechoic chamber. The chamber provides less than -40 dB reflectivity from 800 MHz through 6 GHz and 25cm diameter spherical quite zone. The measurement results are calibrated using both dipole and leaky wave horn standards.

1.1Gain

Frequency(MHZ)	Efficiency(db)	Efficiency(%)	Peak Gain (dbi)
2400	-6.08	24.7	2.12
2410	-5.44	28.5	2.06
2420	-5.21	30.1	2.05
2430	-5	31.6	2.61
2440	-4.34	36.8	2.58
2450	-4.15	38.5	2.87
2460	-4.11	38.8	2.85
2470	-4.39	36.4	2.7
2480	-4.6	34.7	2.45
2490	-4.93	32.1	2.31
2500	-5.26	29.8	2.24

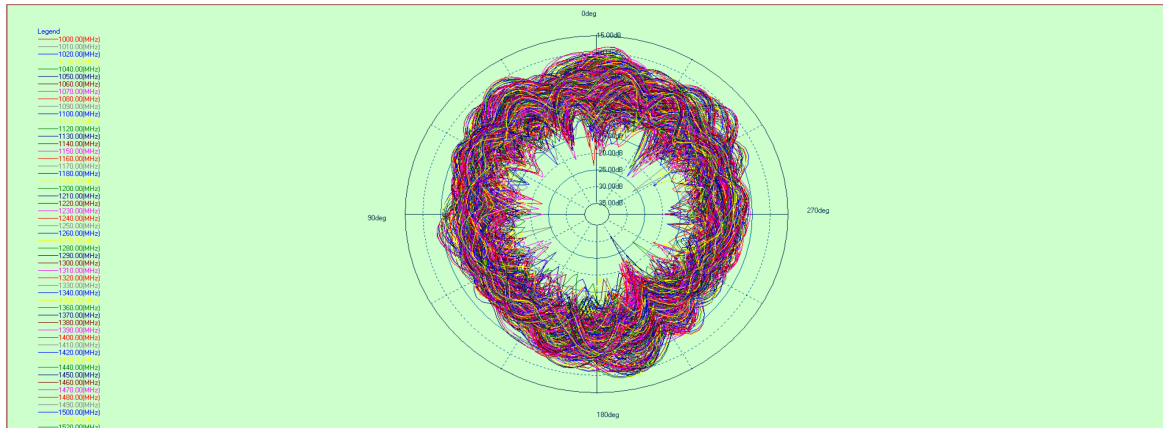
1.2Radiation Patterns



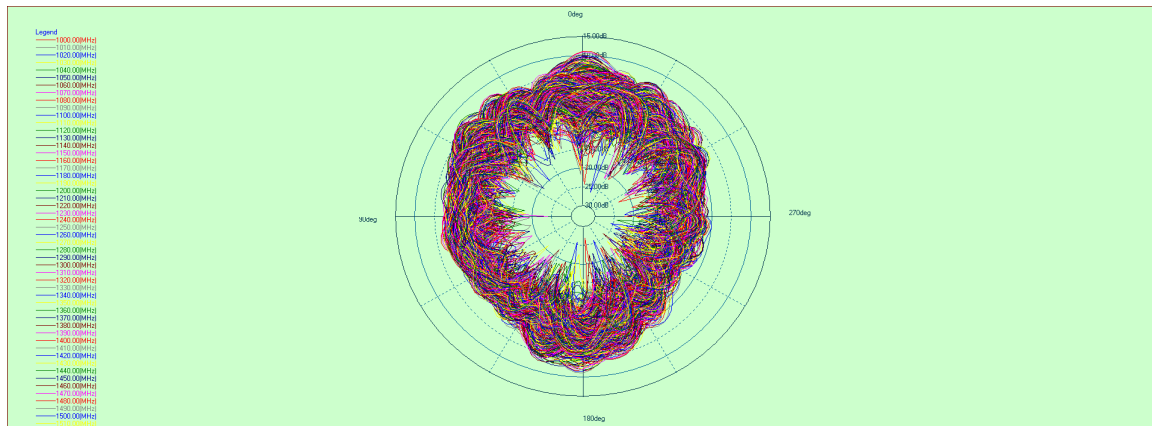
Theta=90°

www.speed-hz.com

SPEED has possession of proprietary information provided in this presentation and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SPEED Communication Technology.



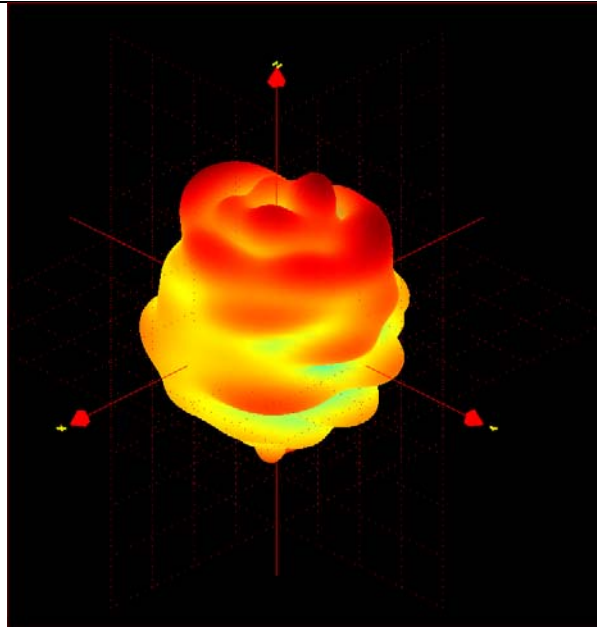
$\Phi = 90^\circ$



$\Phi = 0^\circ$

www.speed-hz.com

SPEED has possession of proprietary information provided in this presentation and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SPEED Communication Technology.



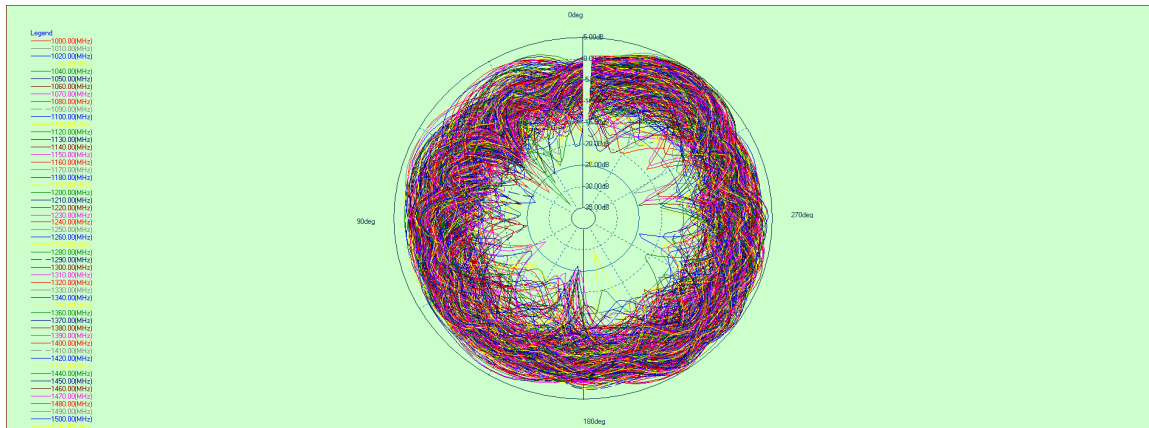
1.3Gain

Frequency(MHZ)	Efficiency(db)	Efficiency(%)	Peak Gain (dbi)
2400	-5.88	25.8	1.91
2410	-5.16	30.5	1.90
2420	-4.84	32.8	2.46
2430	-4.46	35.8	2.43
2440	-4.40	36.3	2.72
2450	-4.67	36.6	2.70
2460	-4.35	36.7	2.55
2470	-4.38	36.5	2.30
2480	-4.46	35.8	2.16
2490	-4.78	33.3	2.09
2500	-5.10	30.9	2.13

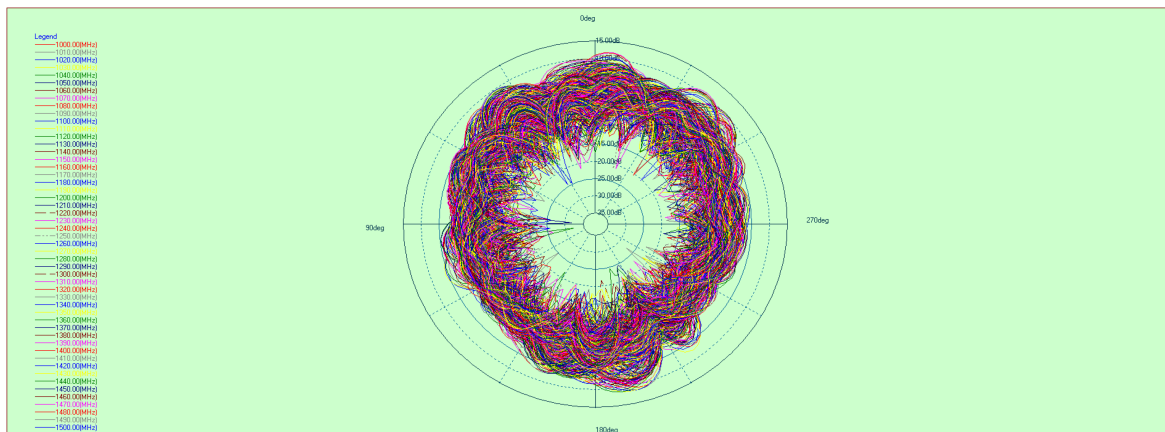
1.4Radiation Patterns

www.speed-hz.com

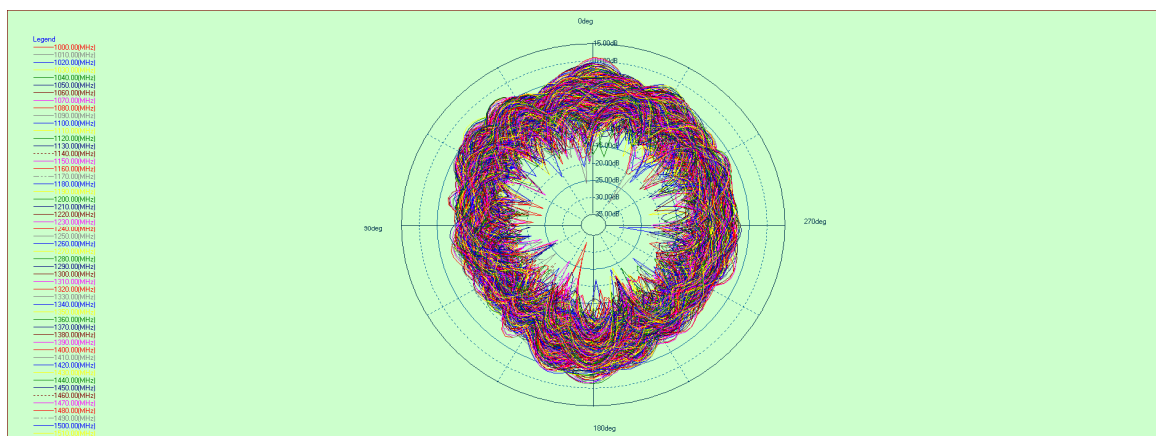
SPEED has possession of proprietary information provided in this presentation and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SPEED Communication Technology.



$\Theta = 90^\circ$



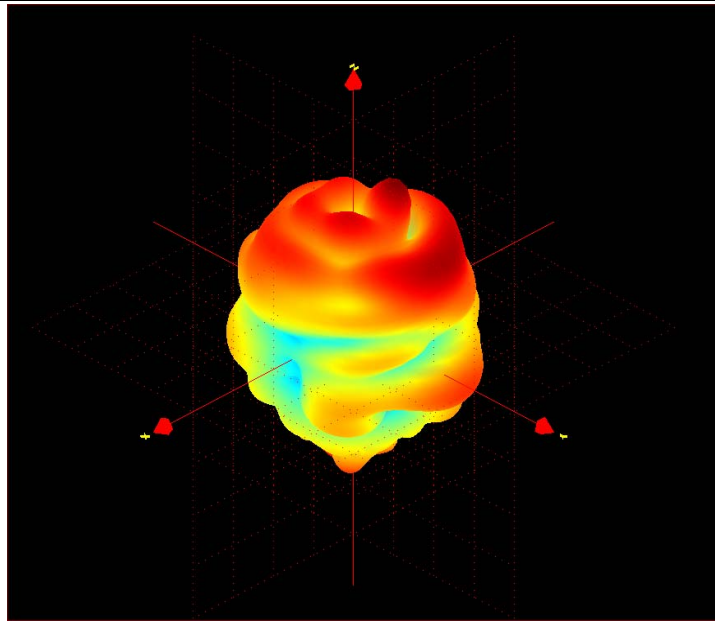
$\Phi = 90^\circ$



$\Phi = 0^\circ$

www.speed-hz.com

SPEED has possession of proprietary information provided in this presentation and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SPEED Communication Technology.



www.speed-hz.com

SPEED has possession of proprietary information provided in this presentation and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SPEED Communication Technology.

2、 Attachment

2、 Antenna Photo

Indication

This report summarizes the electrical performance structure drawings confirmed by the customers of lower antenna of 6301-TX project, The antenna is an assembly Inside the microphone (see Figure1).



Figure 1: Proposed Antenna

www.speed-hz.com

SPEED has possession of proprietary information provided in this presentation and this proprietary information shall be kept in strict confidence and not disclosed to any person or firm without the prior written consent of SPEED Communication Technology.