



# Shenzhen Yingfeng antenna technology Co., LTD

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## RT62AE Test Report

<b>client</b>	<b>Hai Lingwei</b>
<b>product</b>	<b>TWS headphones</b>
<b>engineer</b>	<b>Simon</b>
<b>telephone</b>	<b>18118726256</b>
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<b>Day period</b>	<b>2023-12-15</b>



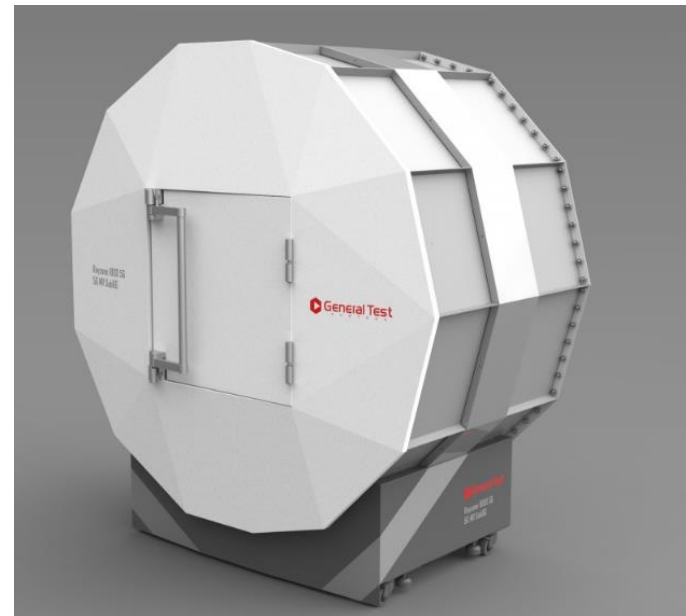
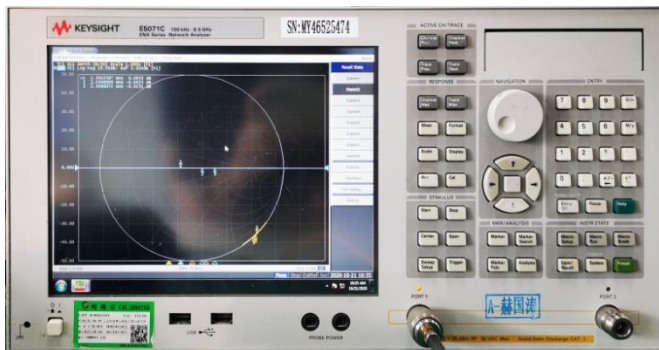
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# Test condition

- 1. Measurement of S parameters
- 2. Equipment: Network Analyzer (Agilent E5062A), microwave darkroom, MT8852B
- 3. Items: Impedance, return loss, VSWR, Efficiency, gain, radiation field pattern, Sensitivity, Power, frequency offset active data TRP TIS





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# Prototype appearance

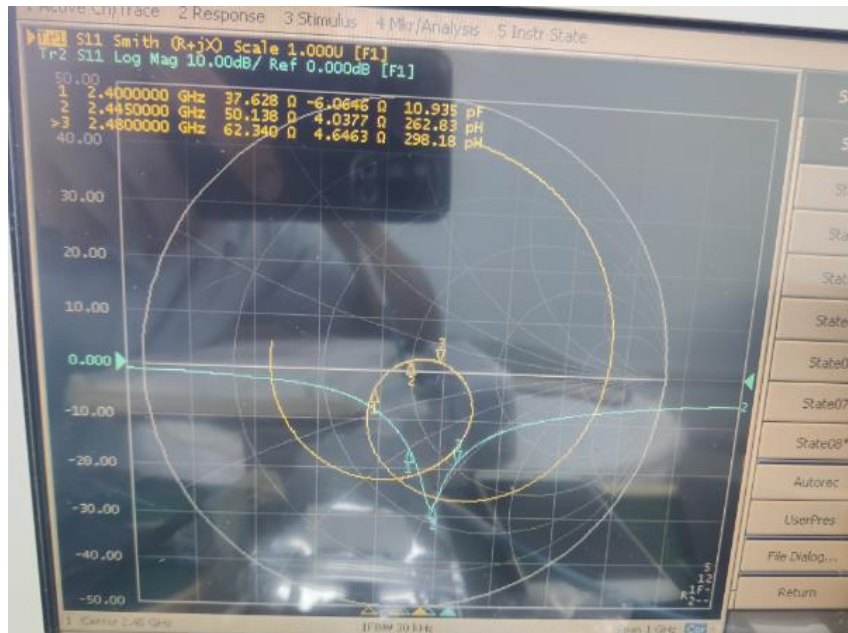




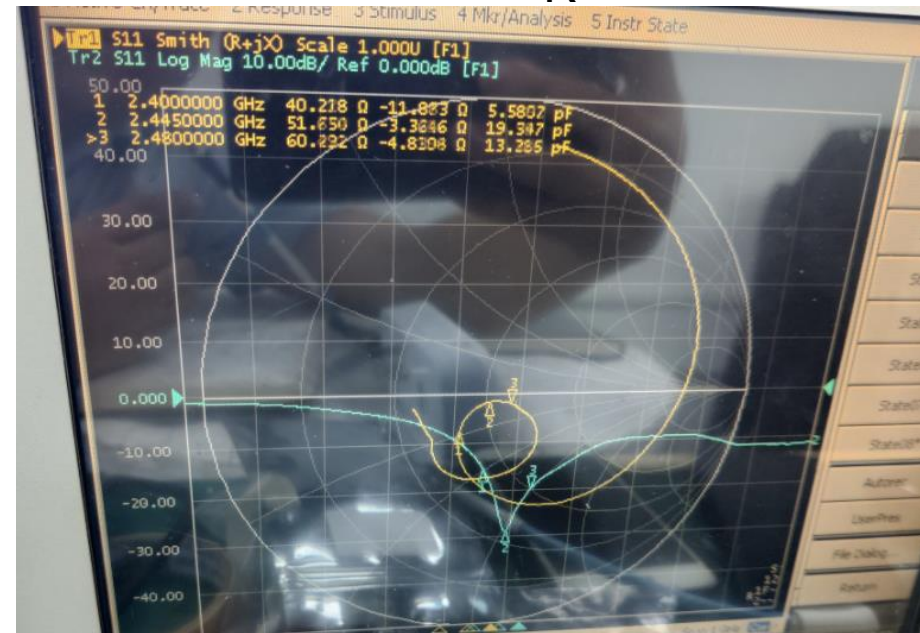
## Network debugging antenna S parameter

Debug waveform

L



R

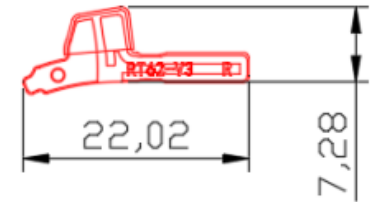
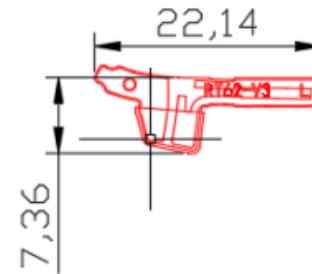
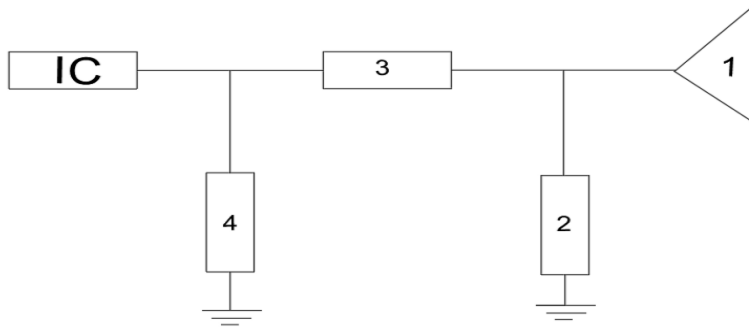


	Log mag	smith
2400	-15	37
2445	-28	50
2480	-16	62

	Log mag	smith
2400	-14	40
2445	-29	51
2480	-20	60



# matching parameter



serial number	model	specification	manufacturer	object ID	tolerance	
1	FPC	22. 2*7. 3 *0. 12	Yingfeng	S2B4BB1F1B30000		
2	NC					
3	capacitance	1. 0PF/0201	Murata		$\pm 0. 1PF$	
4	inductance	2. 7NH/0201	Murata		$\pm 0. 1NH$	



# Free field passive efficiency of the whole machine

L.

Freq(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	-0.324338066	-4.240472891	35.6662783
2410	-0.462047401	-4.387080042	35.41597949
2420	-0.608019688	-4.601400325	34.66250677
2430	-0.701363976	-4.738903633	33.58223812
2440	-0.623219658	-4.671012699	34.11133606
2450	-0.654964299	-4.840255229	32.8076012
2460	-0.846048539	-5.142072369	31.60502673
2470	-0.787379695	-5.137491487	31.63732554
2480	-0.618416744	-5.153379104	31.52545103
2490	-0.887244529	-5.388171183	30.91897406
2500	-0.938521447	-5.610232275	30.4774719



# Free field passive efficiency of the whole machine

R.

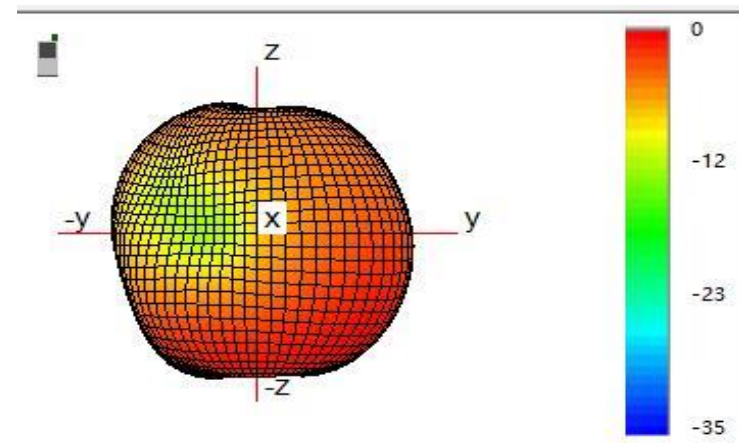
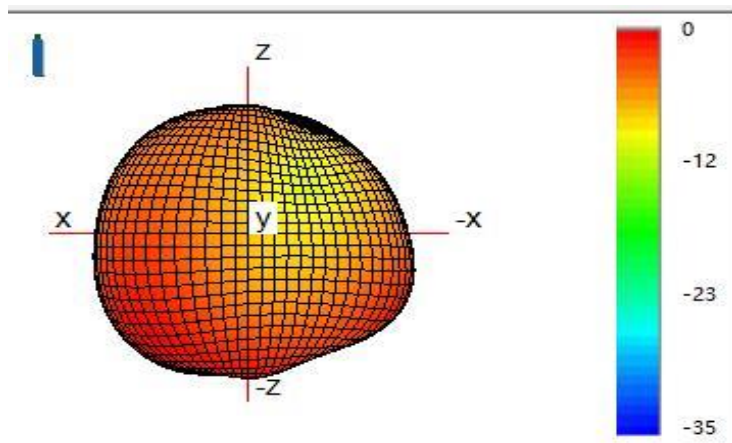
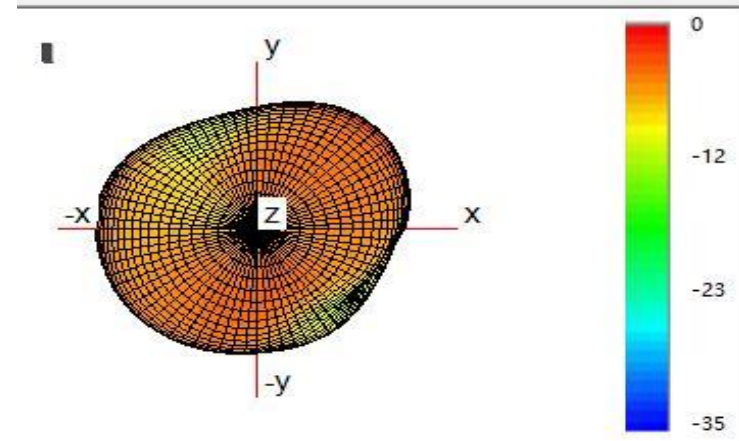
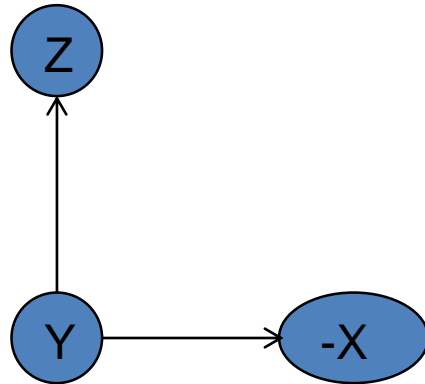
Freq(MHz)	Gain(dBi)	Efficiency(dB)	Efficiency(%)
2400	-1.267810986	-5.211669994	32.11847655
2410	-1.213030841	-5.111073204	32.82426144
2420	-1.283188863	-5.113841365	33.80462055
2430	-1.373348868	-5.093582271	33.94865451
2440	-1.251122558	-4.923749136	35.18289338
2450	-1.397611302	-4.933758829	36.10880311
2460	-1.752639211	-5.168729012	34.41775089
2470	-1.794139822	-5.138568707	33.62972723
2480	-1.789844203	-5.093440156	32.94966727
2490	-1.997678175	-5.28006193	32.64789112
2500	-2.027150766	-5.378487681	31.98352689





# Complete free field passive field type

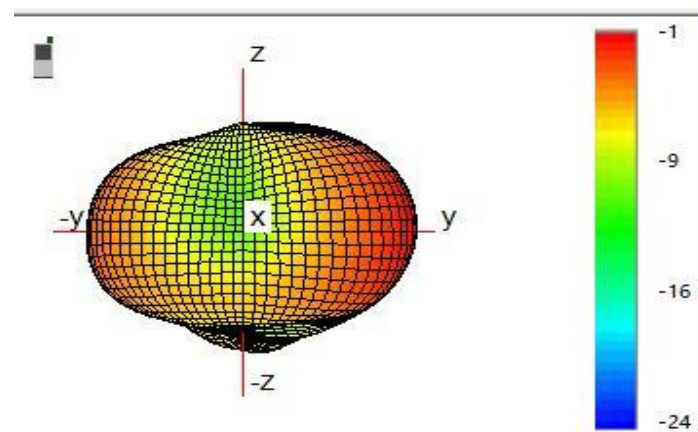
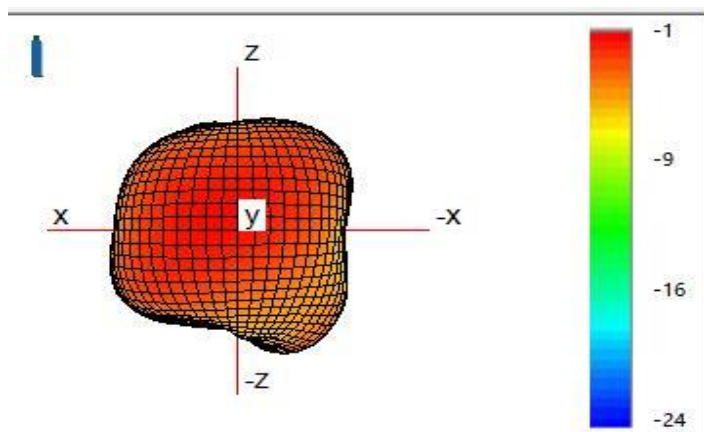
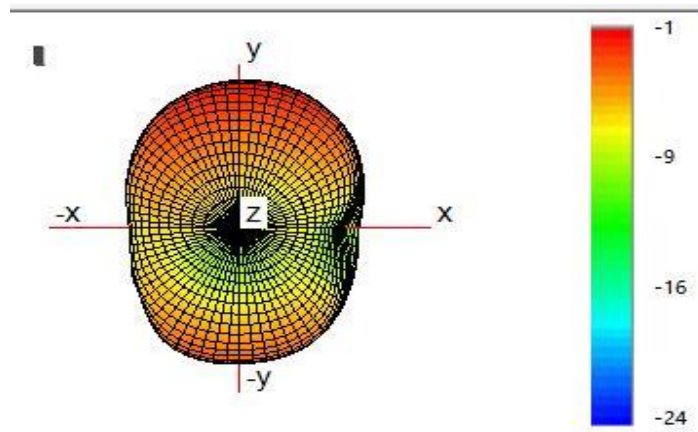
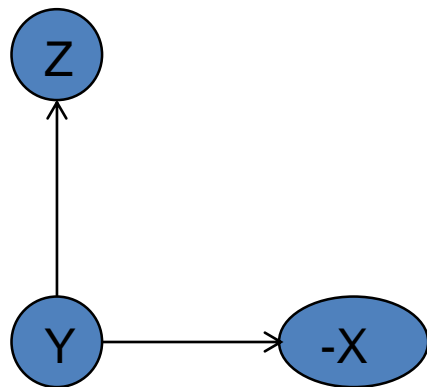
L.





# Complete free field passive field type

R.





# Complete machine free field OTA data

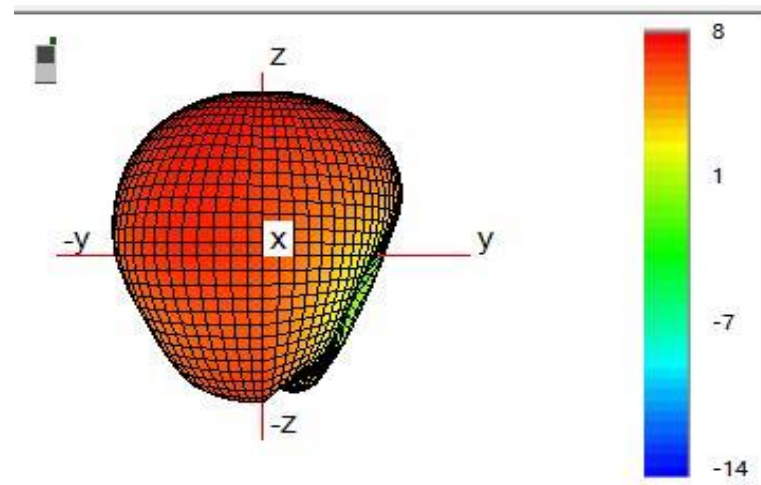
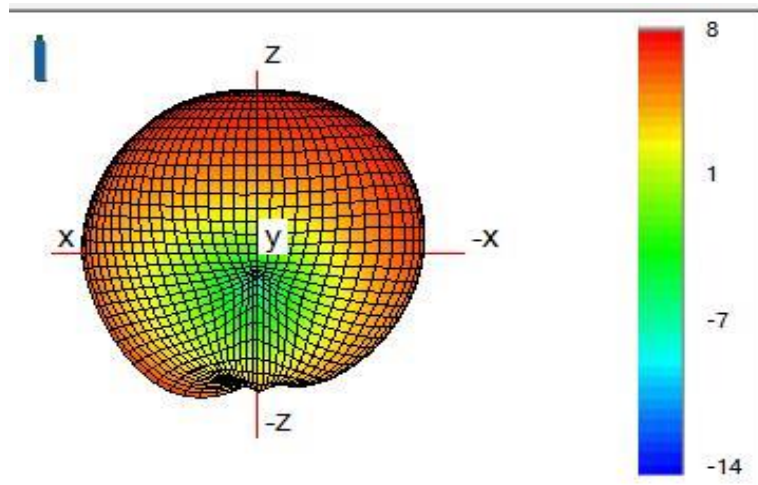
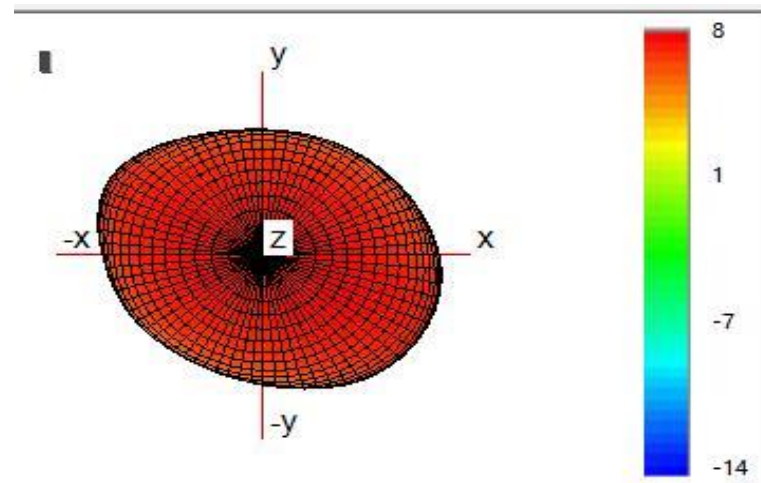
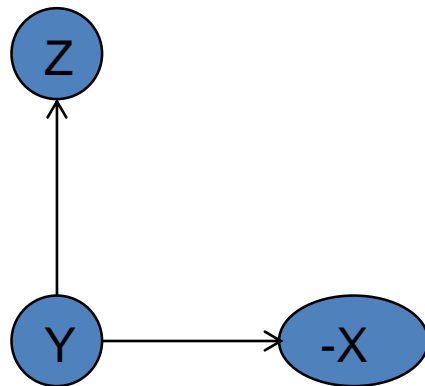
	Channel	TRP (dBm)	TIS (dBm)
L	CH0	3.777806938	-86.91468993
	CH39	4.70828647	-87.14382509
	CH78	3.434392492	-86.74811851

	Channel	TRP (dBm)	TIS (dBm)
R	CH0	3.817338495	-87.06051399
	CH39	4.267961799	-88.90326842
	CH78	2.288245777	-87.82475793



# Complete free field OTA field type

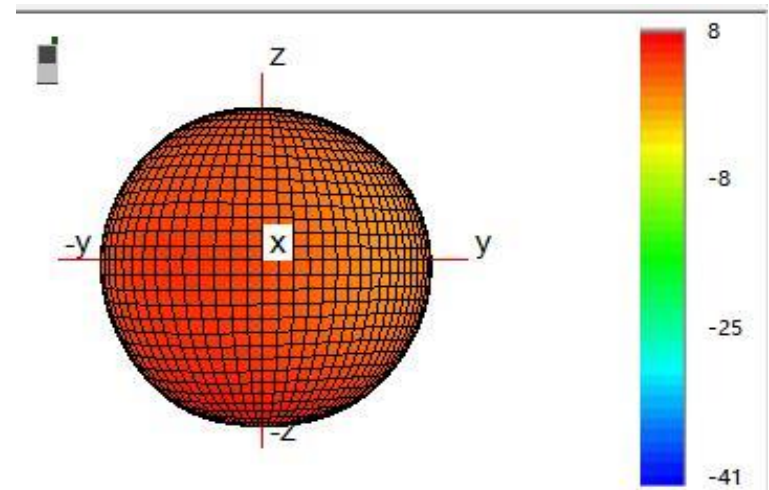
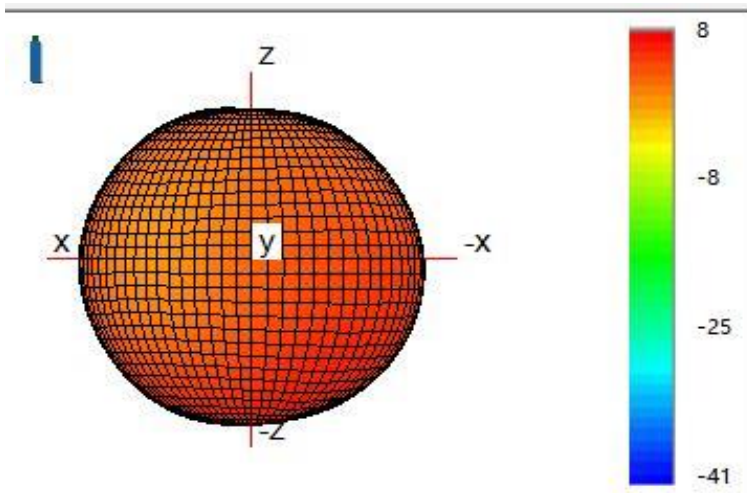
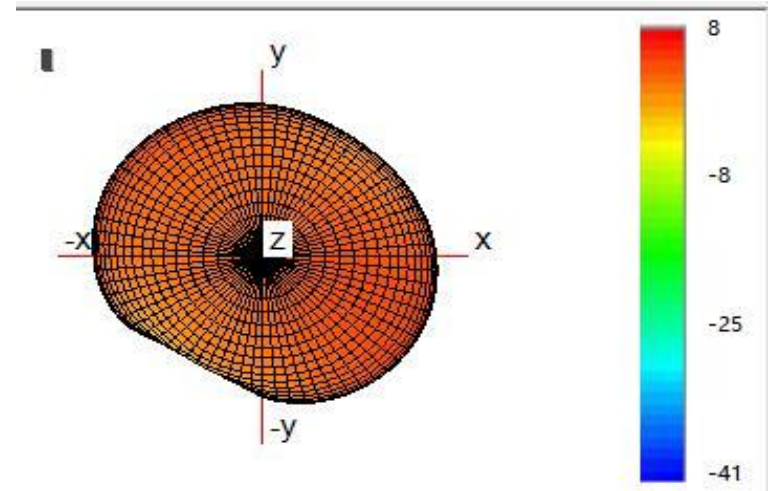
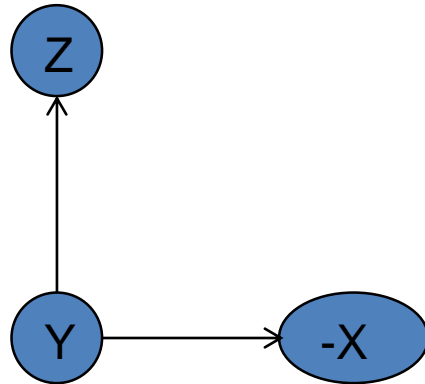
L.





# Complete free field OTA field type

R.





## OTA data of machine head

	Channel	TRP (dBm)	TIS (dBm)
L	CH0	-2.788610615	-81.6705273
	CH39	-3.326240329	-82.96811214
	CH78	-2.982339539	-81.32160129

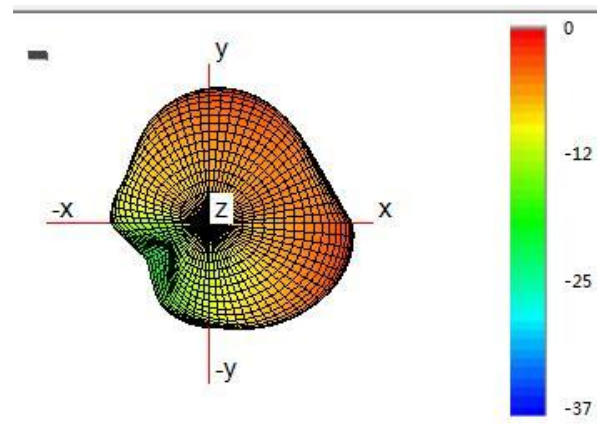
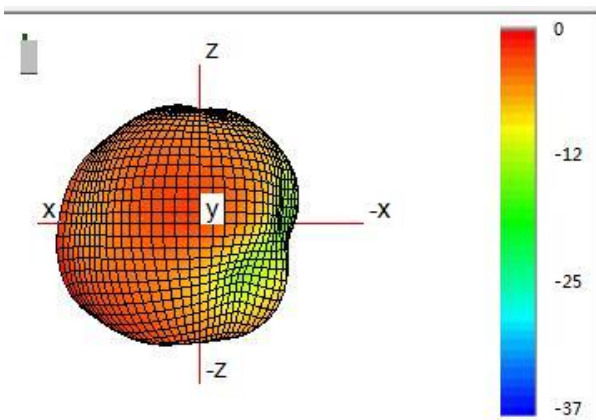
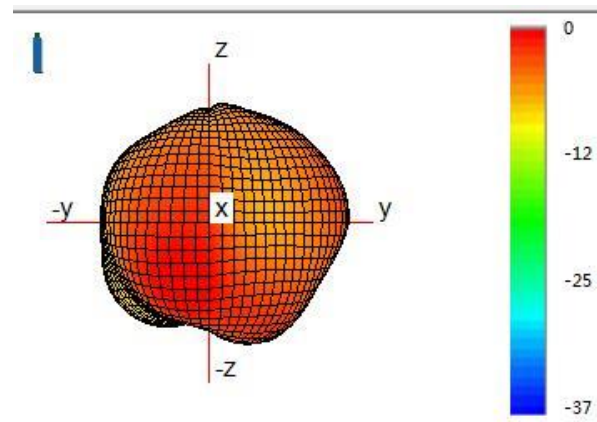
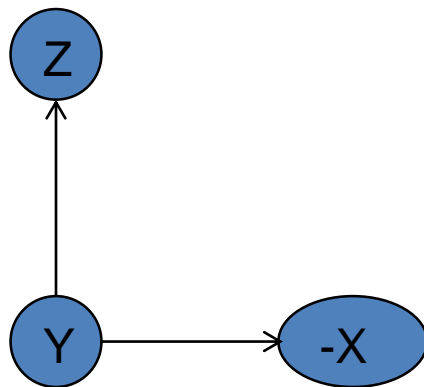
	Channel	TRP (dBm)	TIS (dBm)
R	CH0	-1.594566089	-80.13151839
	CH39	0.173053353	-81.35767919
	CH78	-0.589915297	-81.87348402





# The whole head OTA field type

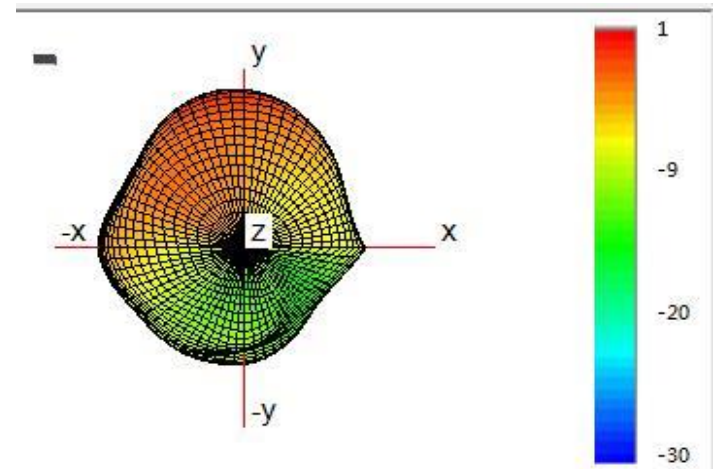
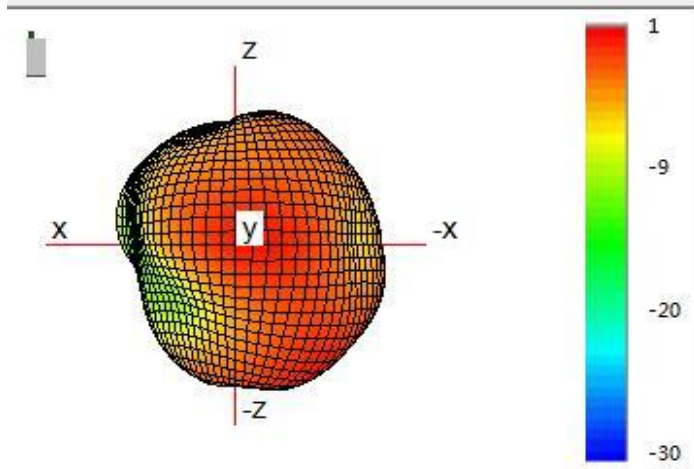
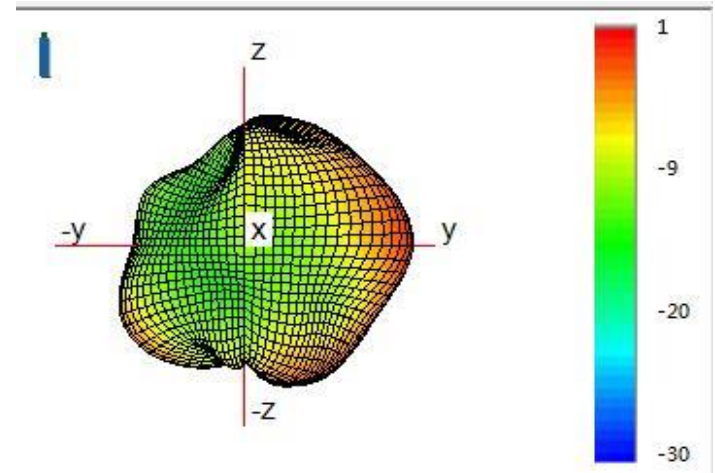
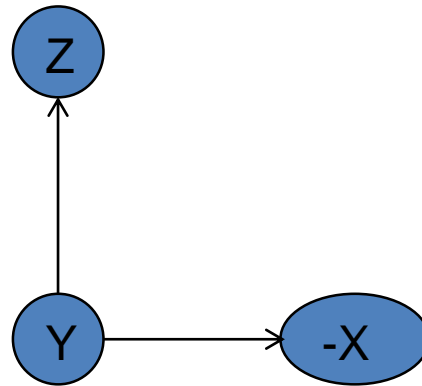
L.





# The whole head OTA field type

R.







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*Thanks for Your Attention*