

Antenna Type: PCB Antenna

Antenna Manufacture: Soundlab Technology Company Limited

**Address:No.101, 202, Building 1, Microlab Industrial Park, No.2
Baozi South Road, Kengzi, Pingshan District, Shenzhen, Guang
dong,P.R. China**

Antenna Model Number:PCB Antenna

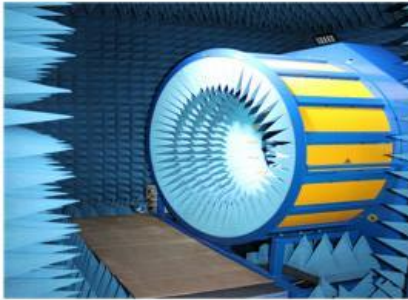
Antenna Layout & module on the system board



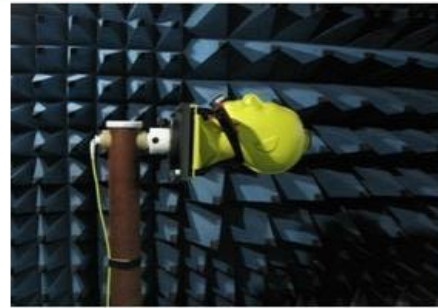
1. Testing Environment

a. Test System

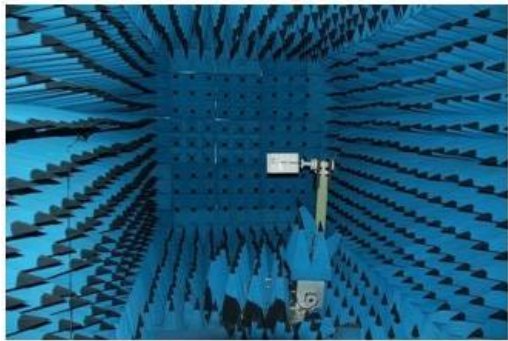
chamber



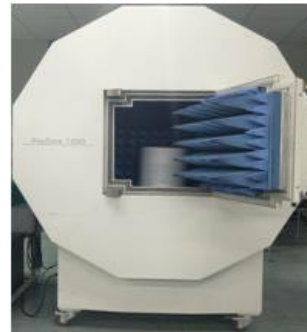
Satimo



Airlink



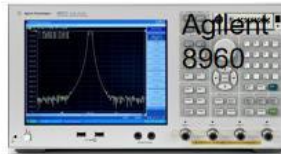
Guang Ping



GTS

b. Test Instrument

equipment



Generator



2. Passive test data

Passive Efficiency & Gain

frequency (MHz)	efficiency (%)	efficiency (dB)	Gain (dB)
2400	39.21	-4.07	1.22
2410	36.37	-4.39	1.43
2420	35.67	-4.48	0.17
2430	35.60	-4.49	0.37
2440	37.38	-4.27	1.00
2450	38.57	-4.14	0.99
2460	36.89	-4.33	0.98
2470	35.57	-4.49	0.30
2480	37.02	-4.32	0.39
AVG	36.9	-4.33	0.85

3. Active test data

a. TRP&TIS

free space

Channel CH	TRP (dBm)	TIS (dBm)
0	5.28	-90.51
39	4.92	-90.11
78	5.05	-90.54

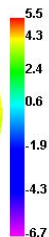
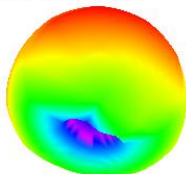
The head ear

Channel CH	TRP (dBm)	TIS (dBm)
0	-2.38	-84.72
39	-2.35	-84.91
78	-2.01	-85.53

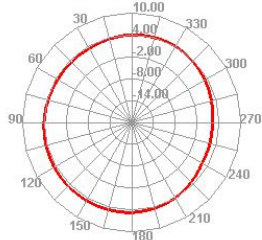
b. Directivity Diagram

free space

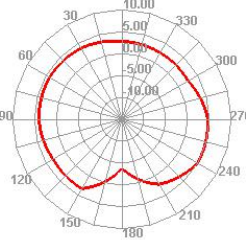
Bluetooth 0 TRP



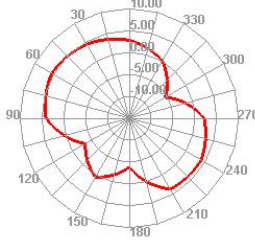
Bluetooth 0 TRP H



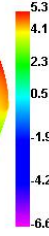
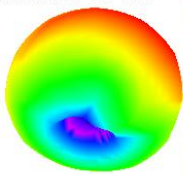
Bluetooth 0 TRP E1



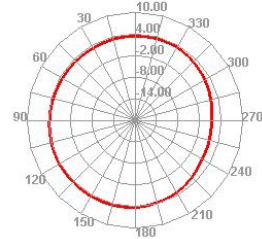
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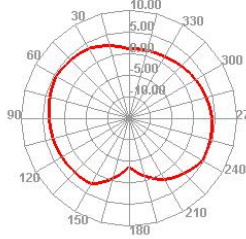
Bluetooth 39 TRP



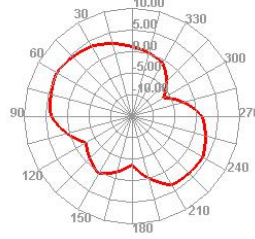
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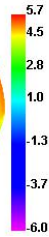
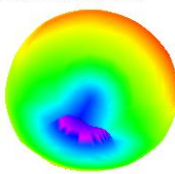
Bluetooth 39 TRP E1



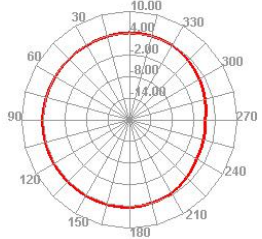
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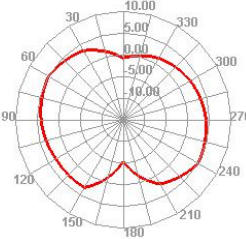
Bluetooth 78 TRP



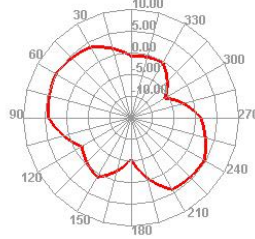
Bluetooth 78 TRP H



Bluetooth 78 TRP E1

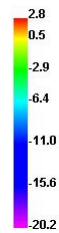
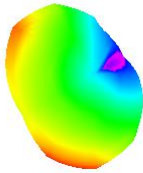


Bluetooth 78 TRP E2

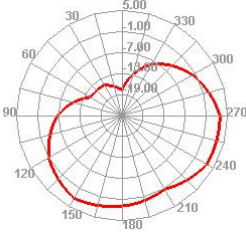


The head ear

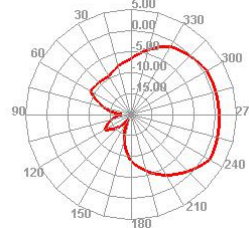
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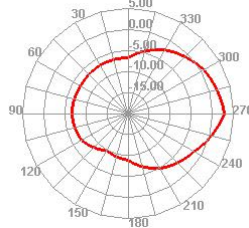
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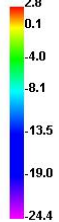
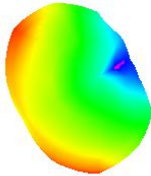
Bluetooth 0 TRP E1



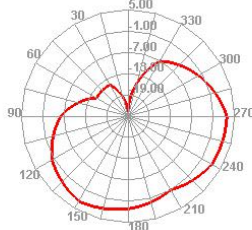
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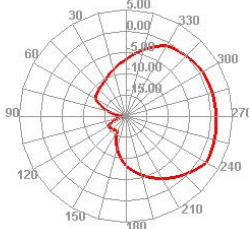
Bluetooth 39 TRP



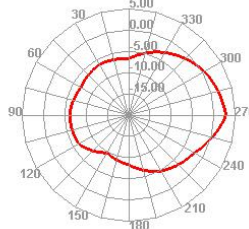
Bluetooth 39 TRP H



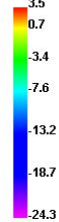
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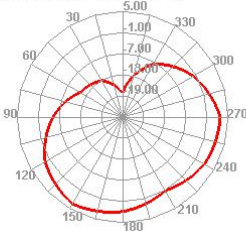
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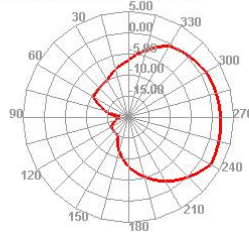
Bluetooth 78 TRP



Bluetooth 78 TRP H



Bluetooth 78 TRP E1



Bluetooth 78 TRP E2

