



好天线 · 优比造

东莞市优比电子有限公司

Dongguan UB Electronics Co., Ltd

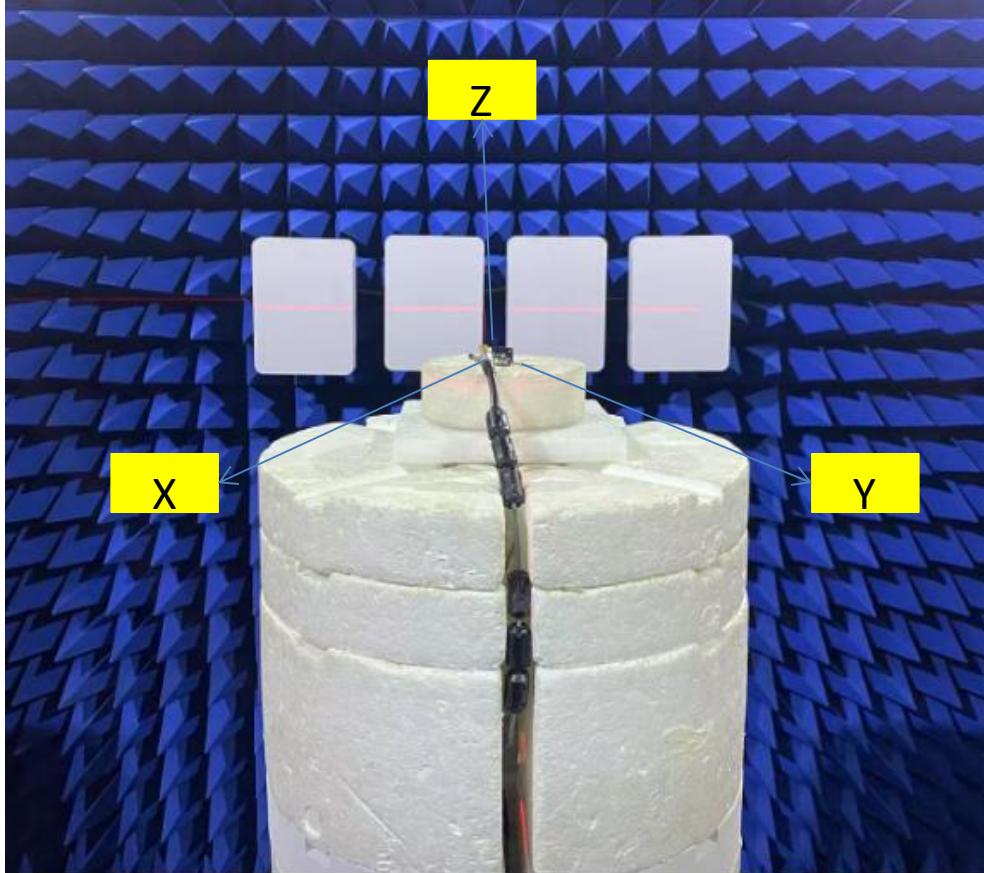
## Antenna Study

- **Client Name: AUTHOR-ALARM d.o.o**
- **Project Name: Wireless tag**
- **Model: Author Keyfob**
- **Debugging frequency band: 2.4G+5.8GHMz**
- **Valuation date: 2025.07.02**

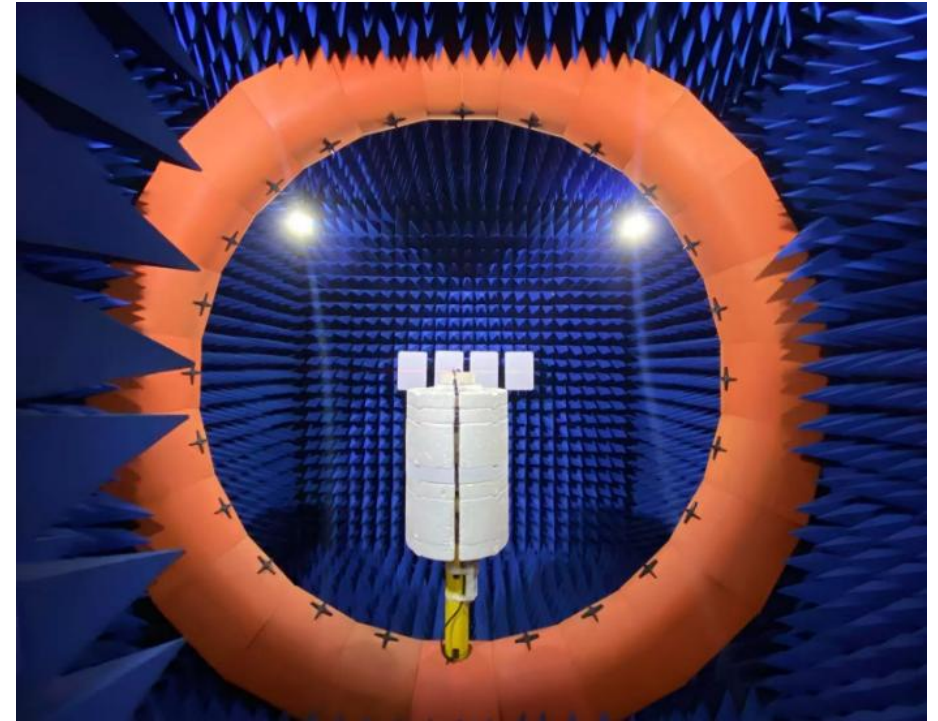
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Testing environment



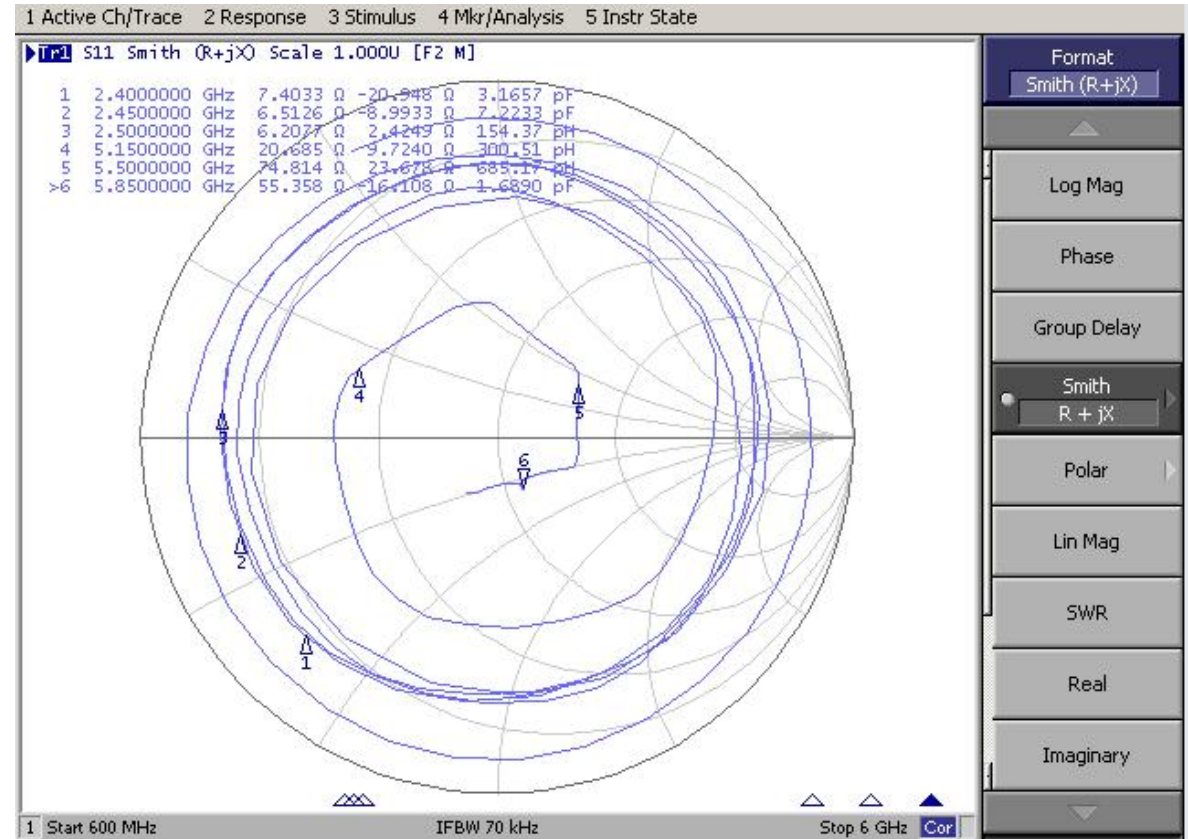
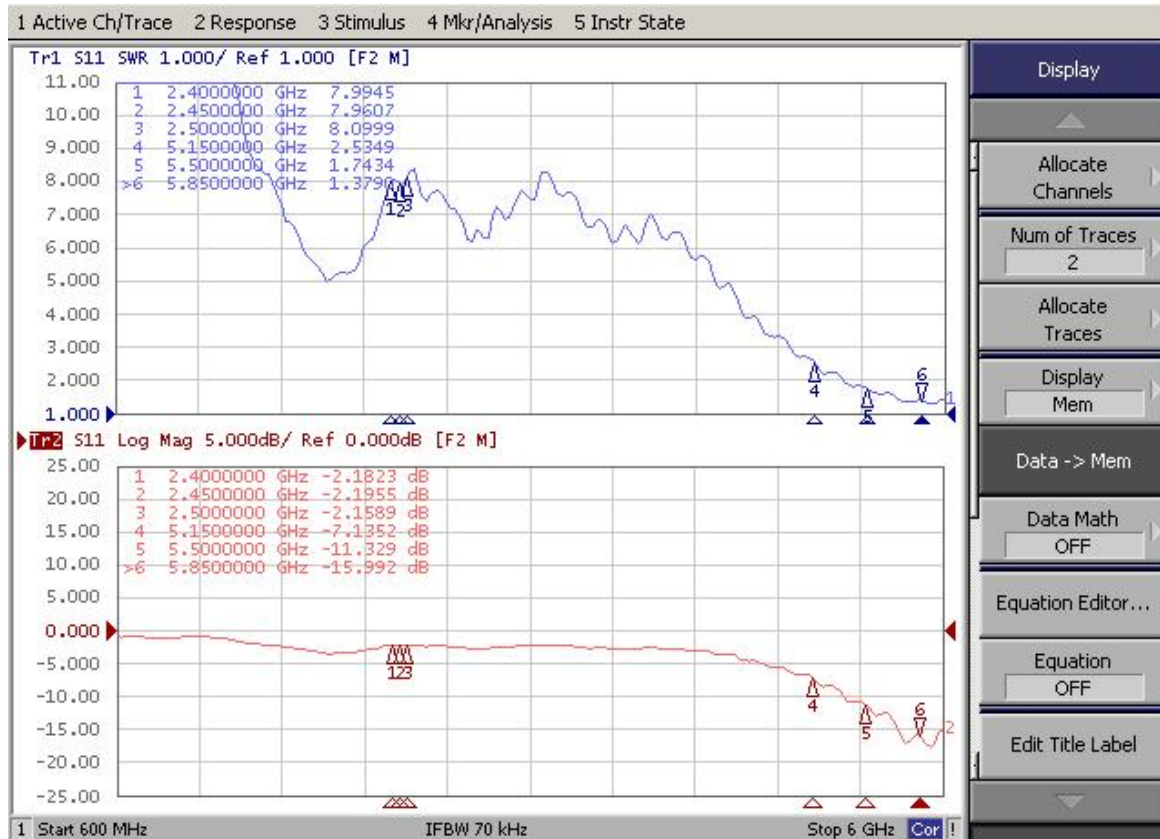
Testing 3D microwave darkroom(3m\*3m\*3m)



- Antenna name: 2.4G+5.8G
- Covers : 2400/2500/5150/5850MHz

Antenna

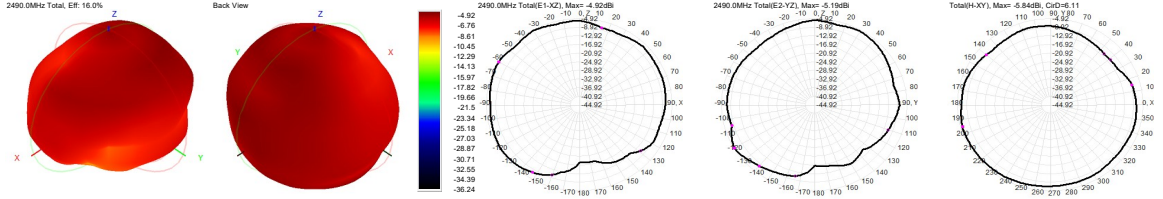
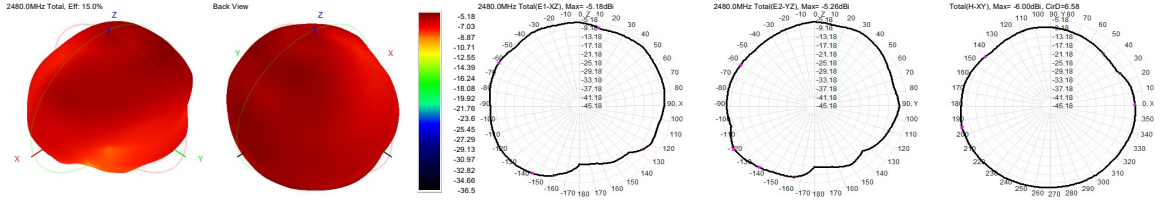
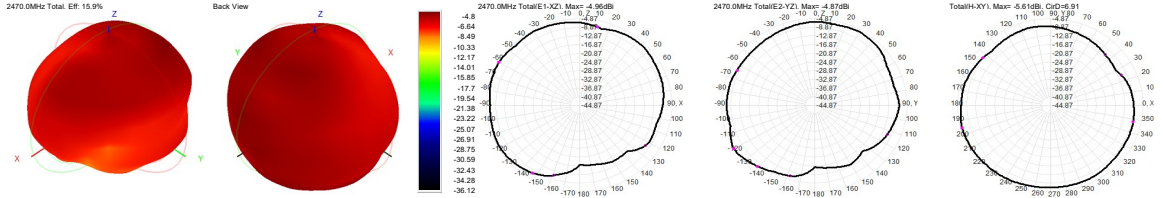
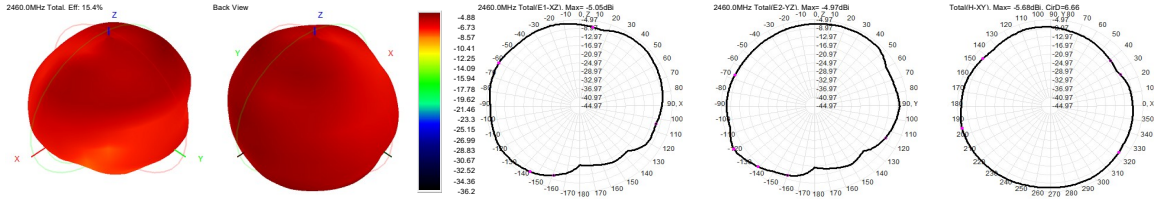
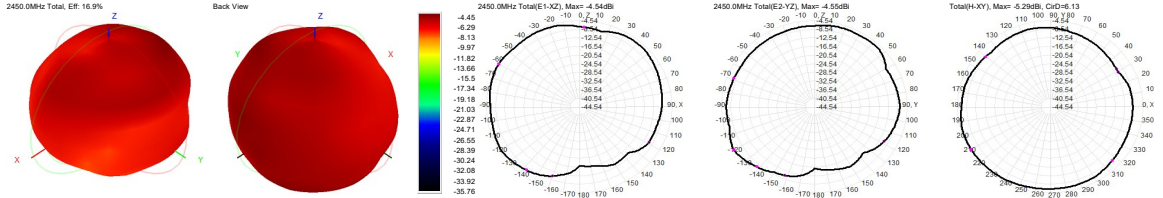
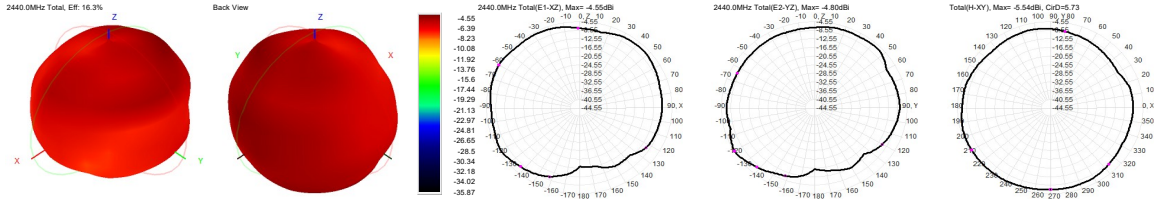
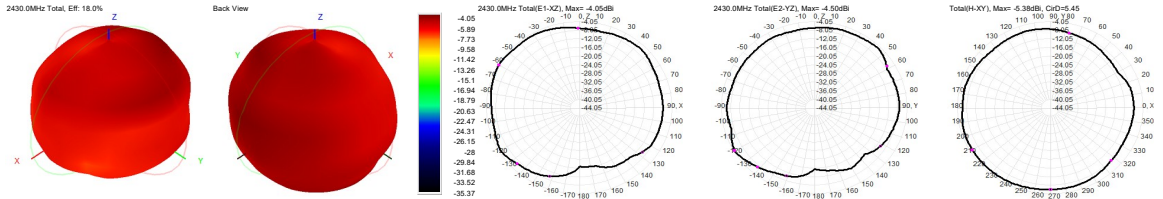
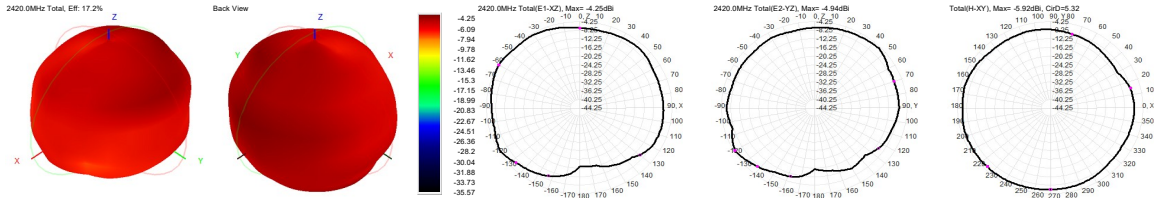
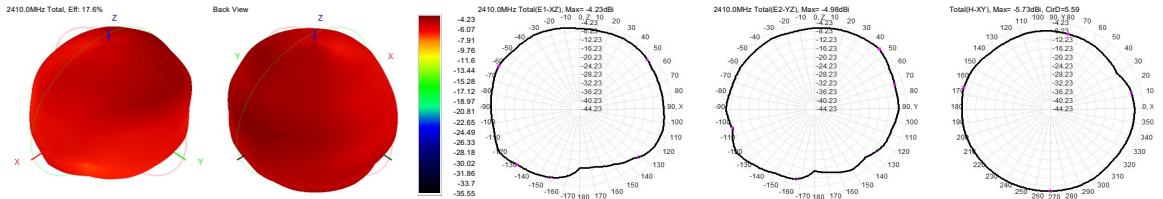
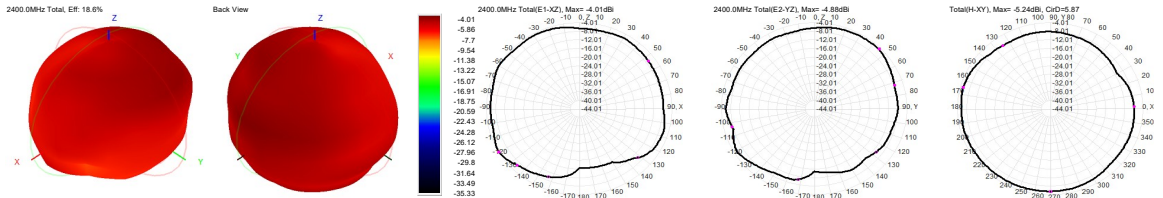
# S Parameter\_Return Loss&VSWR-Smith

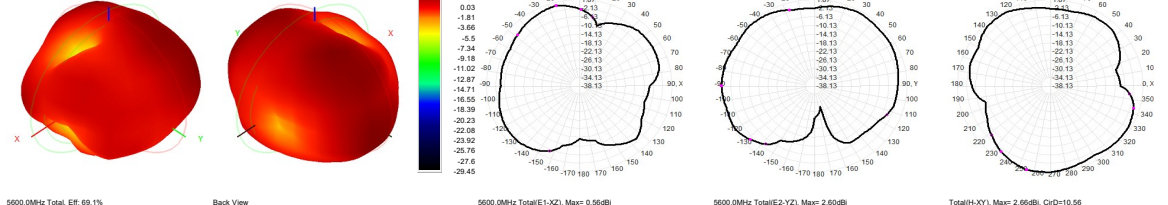
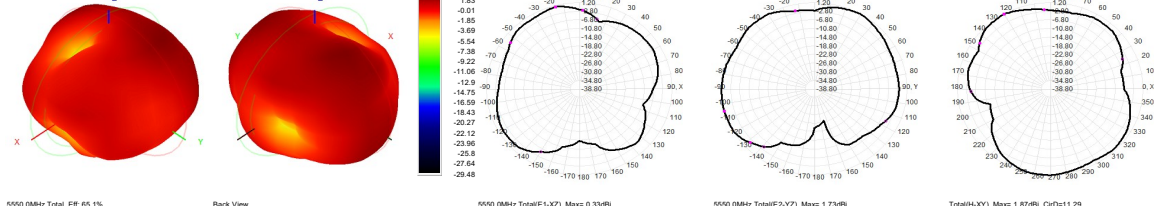
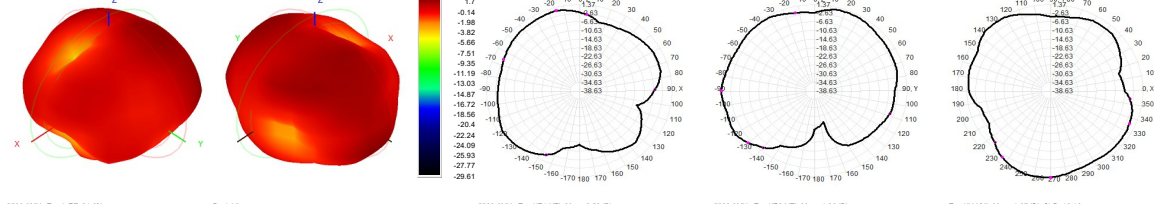
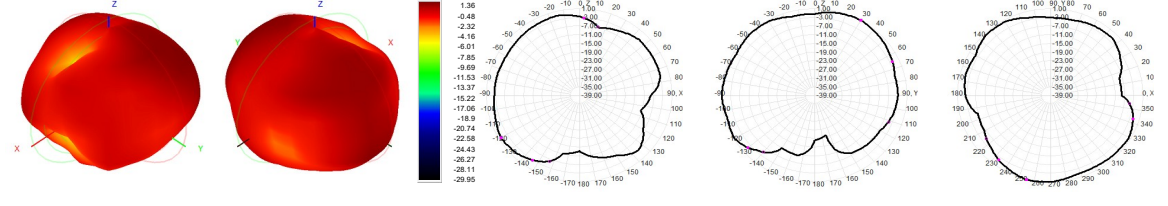
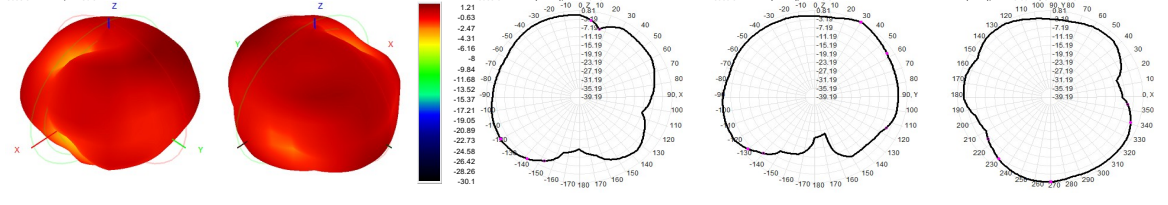
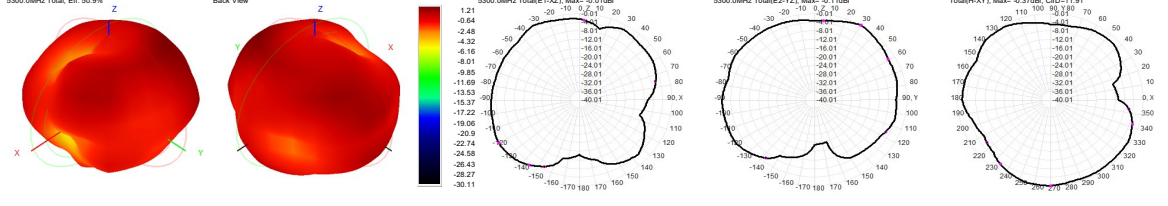
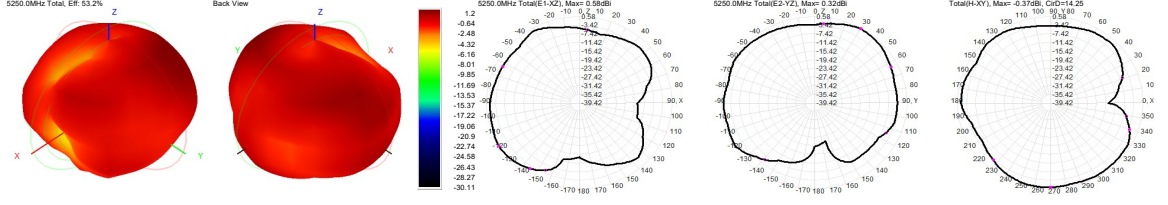
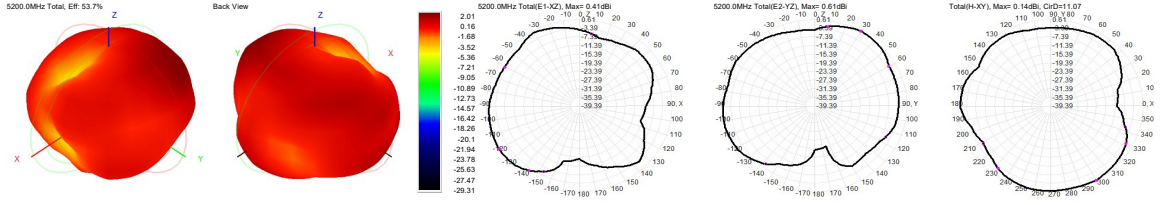
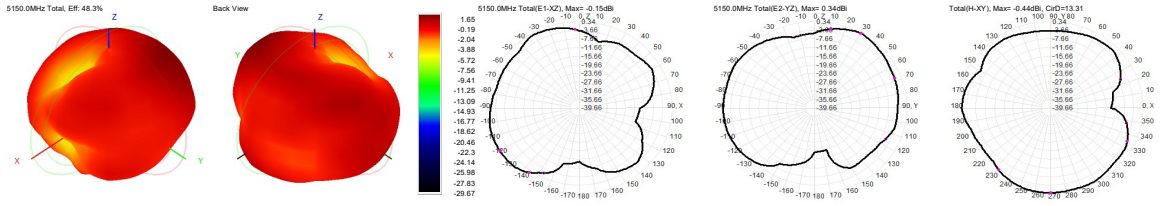
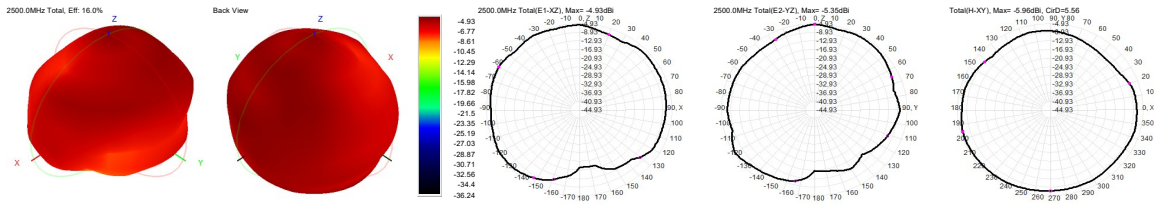


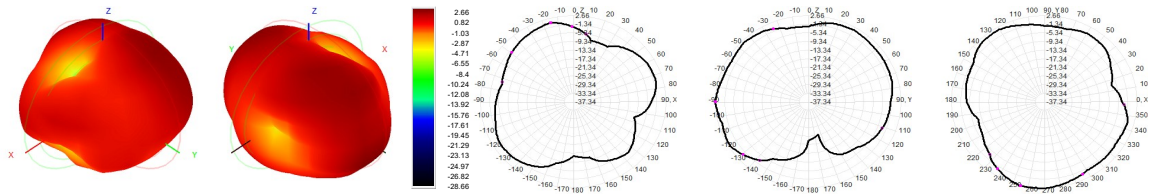
# Efficiency and Gain

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	-4.01	-4.23	-4.25	-4.05	-4.55	-4.45	-4.88	-4.80	-5.18	-4.92	-4.93
Efficiency (%)	18.56	17.59	17.17	18.02	16.32	16.91	15.42	15.91	14.97	15.97	15.95

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
1.65	2.01	1.20	1.21	1.21	1.36	1.70	1.83	1.87	2.66	2.59	2.69	2.76	2.64	2.22
48.28	53.70	53.23	50.94	56.50	59.84	59.83	61.63	65.11	69.07	66.65	67.52	70.56	68.36	68.68

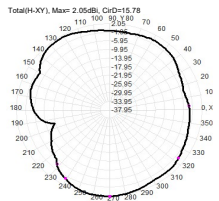
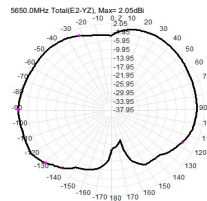
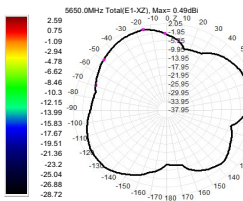
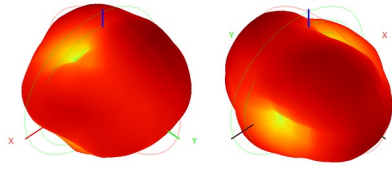






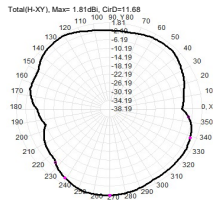
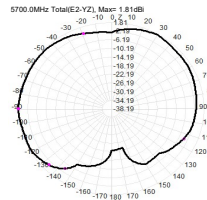
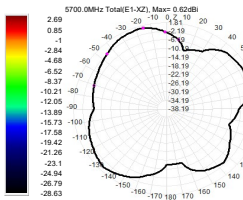
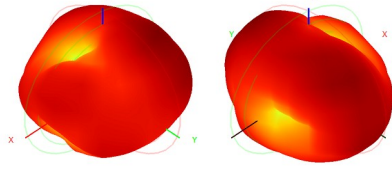
5650 MHz Total, Ef: 66.7%

Back View



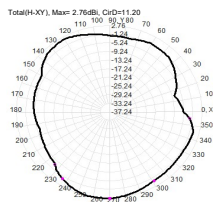
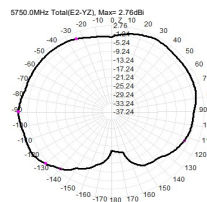
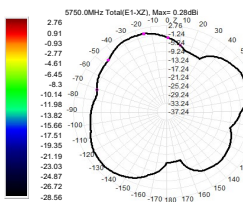
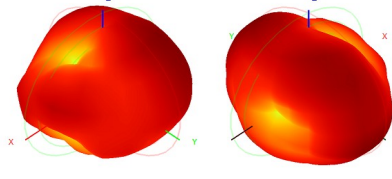
5700 MHz Total, Ef: 67.5%

Back View



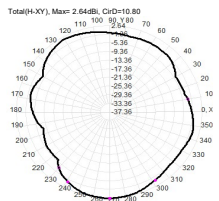
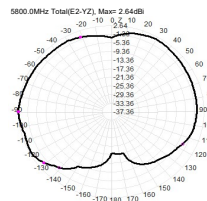
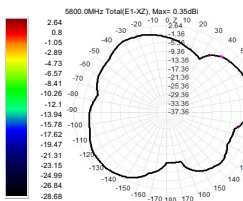
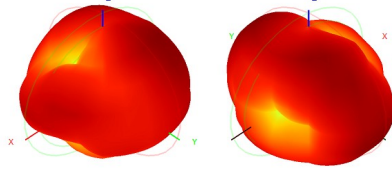
5750 MHz Total, Ef: 70.6%

Back View



5800 MHz Total, Ef: 68.4%

Back View



5850 MHz Total, Ef: 68.7%

Back View

