

Testing Report

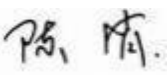
Customer Name: SHENZHEN SHIXINZHONGXIN TECHNOLOGY. CO. , LTD

Product Name: BT Antenna

Sample Model: F-9762

Reference Standard: GB/T9410-2008; ANSI/IEEE Std 149-1979

Issue Date: 2024.01. 10

Engineer:		Date: 2024.01. 10
Auditor:		Date: 2024.01. 10
Approver:		Date: 2024.01. 10

1. General Information

1.1 General Information of testing institutions

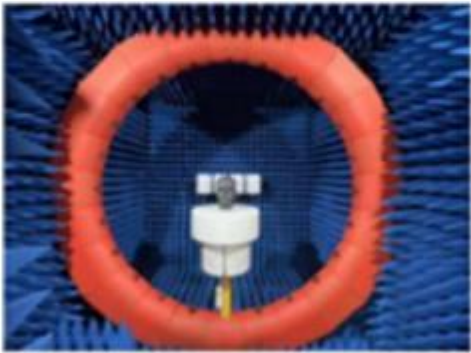
Name	Shenzhen Hetuo Technology Co., Ltd.
Address	Room 1202 B, Building C6, Hengfeng Industrial City, Xixiang, Baoan District, Shenzhen
Tel	18665849001
E-mail	18665849001@163.com
Equipment	Agilent 5071C

1.2 Testing principle

2. Test System

Multi-probe oTA Measurement system

Gain & Efficiency	Gain & Efficiency	SATIMO Agilent 5071C
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Antenna Photo & Lenght(mm)

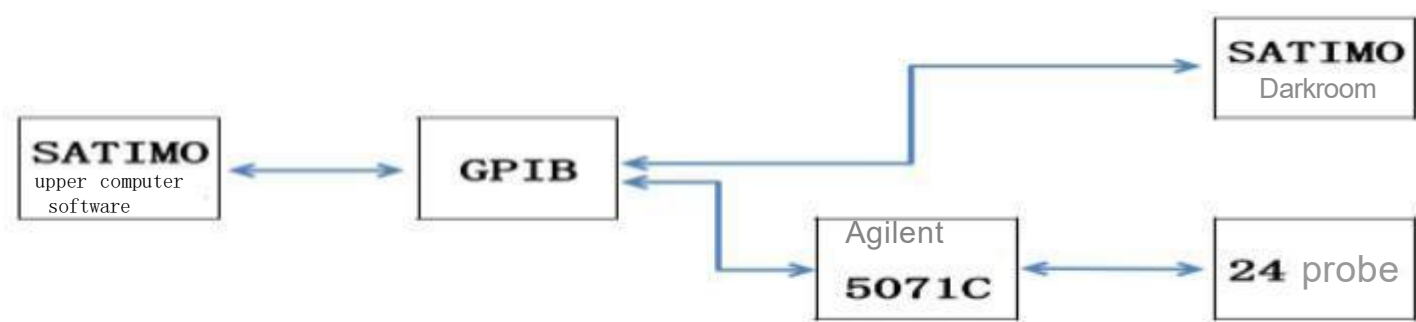
1.3 Test equipment

Equipment	Model No.	Serial No.	Manufacturer	Calibration date	Next calibration date
24 probe microwave chamber	4*3*3	NA	SATIMO	2023.11.30	2024.02.29
Network Analyzer	5071C	NA	Agilent	2023.11.30	2024.02.29

1.4 Test environment

Temperature	24C± 1.5 C
Humidity	45% RH
Pressure	101kPa

1.5 Brief summary of Procedure



1. SATIMO turn on the Upper Computer Software, Name: VeryView99.exe, Version No.: V1.10;
2. VeryView99 via GPIB (General Purpose Interface Bus) to control the shielding room (darkroom)'s SATIMO;
3. Meanwhiel, GPIB control the Agilent 5071C to read the Antenna data by 24 Probe;
4. Agilent 5071C will analyse the data and generate the result;
5. Agilent 5071C will feedback to VeryView99 software to generate the test report.

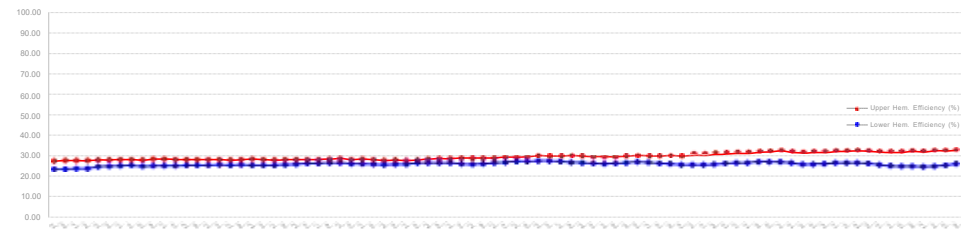
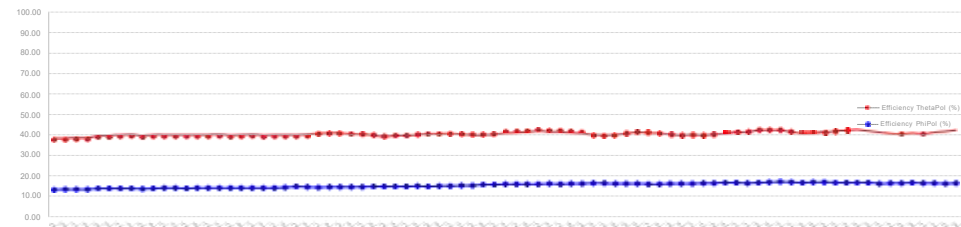
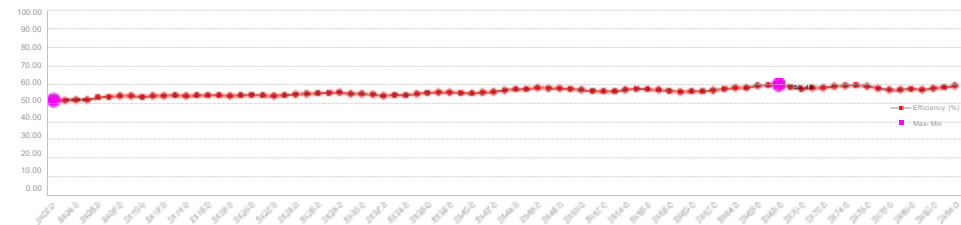
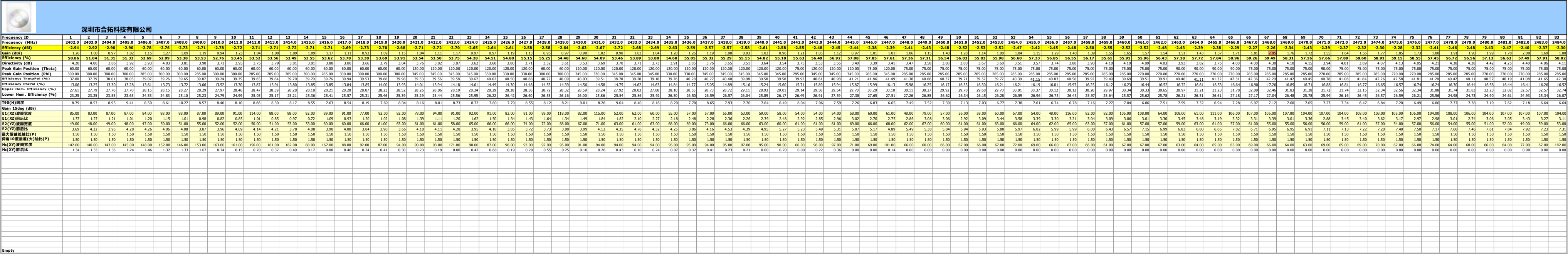
2. Sample Information

2.1 Client information

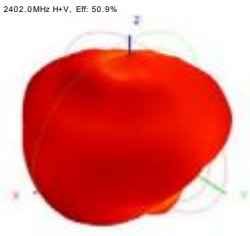
Name	SHENZHEN SHIXINZHONGXIN TECHNOLOGY CO.,LTD
Address	A1 , Shajing Donghuan Industrial Zone , Bao ' an District , Shenzhen
Contacts	Ma Chao
Tel	18218809918
E-mail	machao@ c- chip. com. cn

2.2 Description of EUT(S)

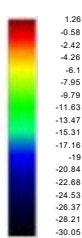
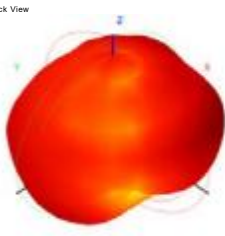
Product Name	BT Antenna
Sample Model	F-9762
Antenna Size	5.5 * 17mm
Antenna Type	PCB antenna
Serial No.	/
Test Item	Antenna Gain, Radiation pattern
Frequency Range	2400-2500MHz
Received Date	2023.12. 15
Test Date	2023.12. 15
Remark	The length of the RF cable is 50mm



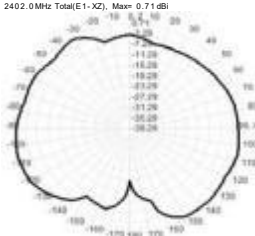
2402.0MHz H+V, Eff: 50.9%



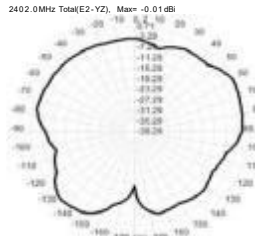
Back View



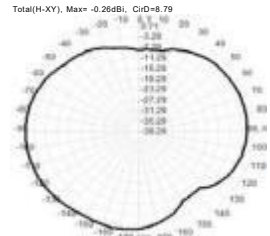
2402.0MHz Total(E1-XZ), Max=-0.71dBi



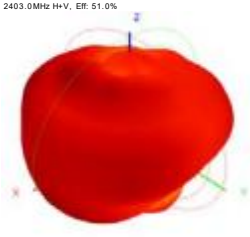
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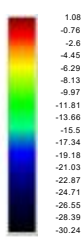
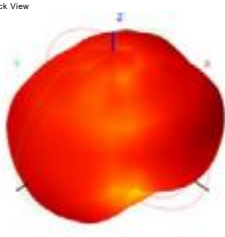
Total(H-XY), Max=-0.26dBi, C/D=8.79



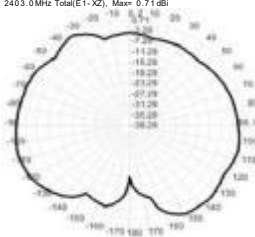
2403.0MHz H+V, Eff: 51.0%



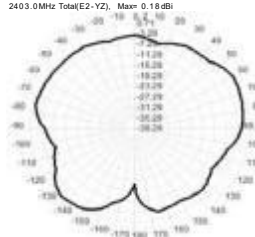
Back View



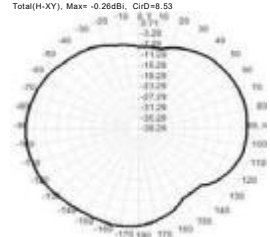
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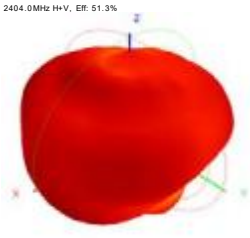
2403.0MHz Total(E2-YZ), Max=0.18dBi



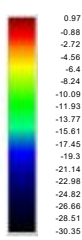
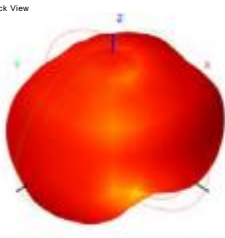
Total(H-XY), Max=-0.26dBi, C/D=8.53



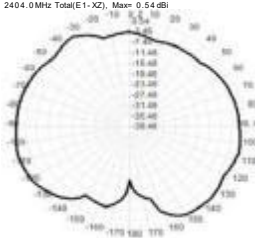
2404.0MHz H+V, Eff: 51.3%



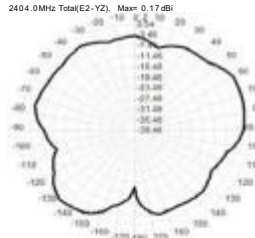
Back View



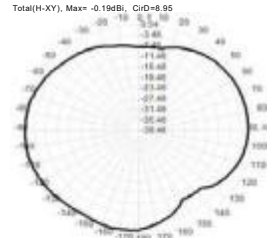
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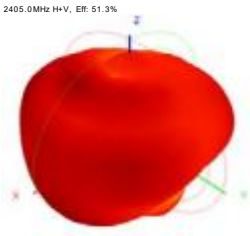
2404.0MHz Total(E2-YZ), Max=0.17dBi



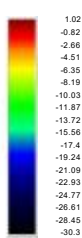
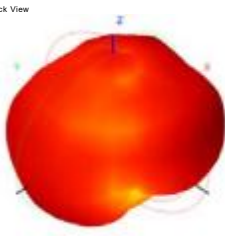
Total(H-XY), Max=-0.19dBi, C/D=9.95



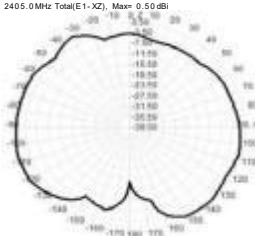
2405.0MHz H+V, Eff: 51.3%



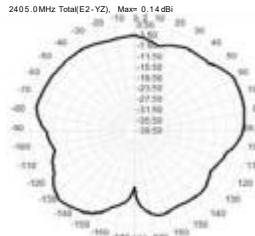
Back View



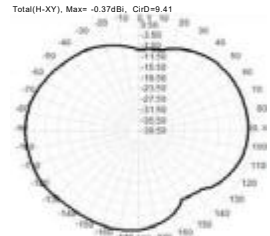
2405.0MHz Total(E1-XZ), Max=0.50dBi



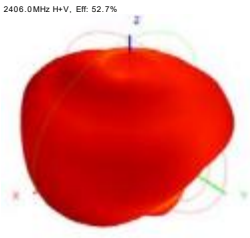
2405.0MHz Total(E2-YZ), Max=0.14dBi



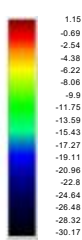
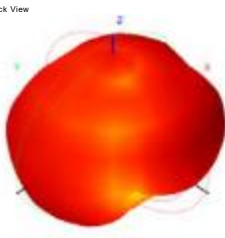
Total(H-XY), Max=-0.37dBi, C/D=9.41



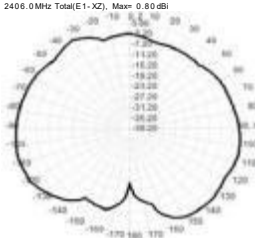
2406.0MHz H+V, Eff: 52.7%



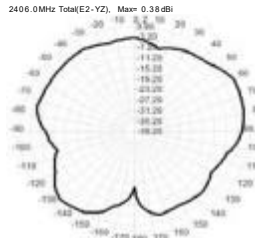
Back View



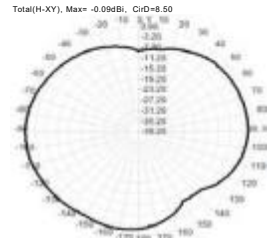
2406.0MHz Total(E1-XZ), Max=0.80dBi



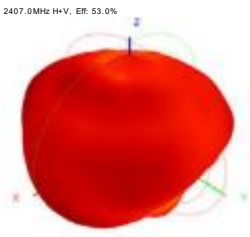
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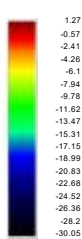
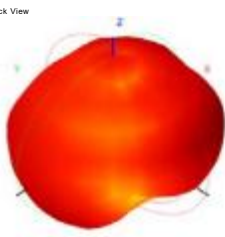
Total(H-XY), Max=-0.09dBi, C/D=8.50



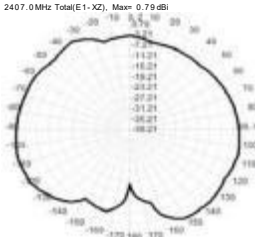
2407.0MHz H+V, Eff: 53.0%



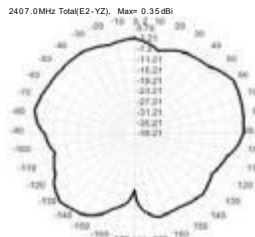
Back View



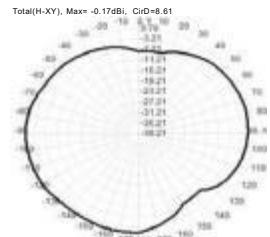
2407.0MHz Total(E1-XZ), Max=0.79dBi



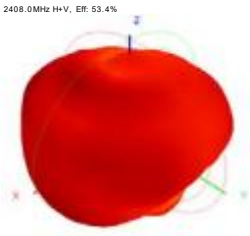
2407.0MHz Total(E2-YZ), Max=0.35dBi



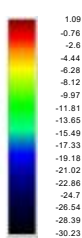
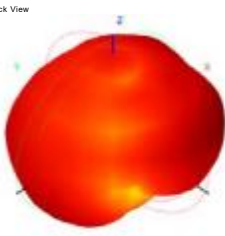
Total(H-XY), Max=-0.17dBi, C/D=8.61



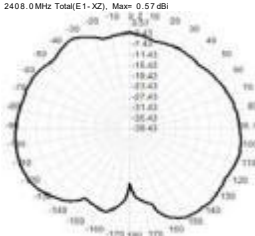
2408.0MHz H+V, Eff: 53.4%



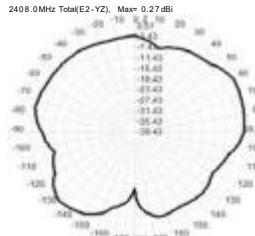
Back View



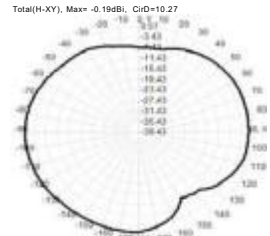
2408.0MHz Total(E1-XZ), Max=0.57dBi



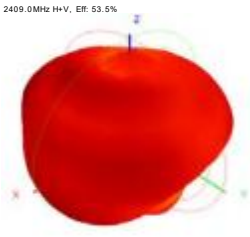
2408.0MHz Total(E2-YZ), Max=0.27dBi



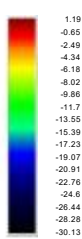
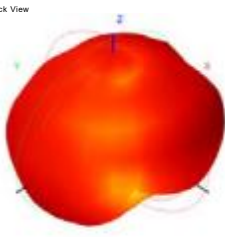
Total(H-XY), Max=-0.19dBi, C/D=10.27



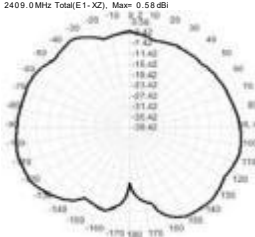
2409.0MHz H+V, Eff: 53.5%



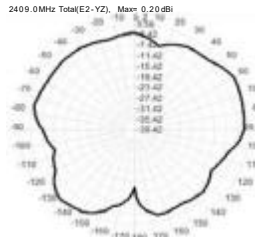
Back View



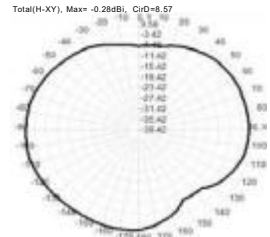
2409.0MHz Total(E1-XZ), Max=0.58dBi



2409.0MHz Total(E2-YZ), Max=0.20dBi



Total(H-XY), Max=-0.28dBi, C/D=8.57



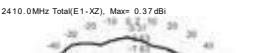
2410.0MHz H+V, Eff: 52.8%



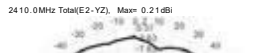
Back View



2410.0MHz Total(E1-XZ), Max=0.37dBi

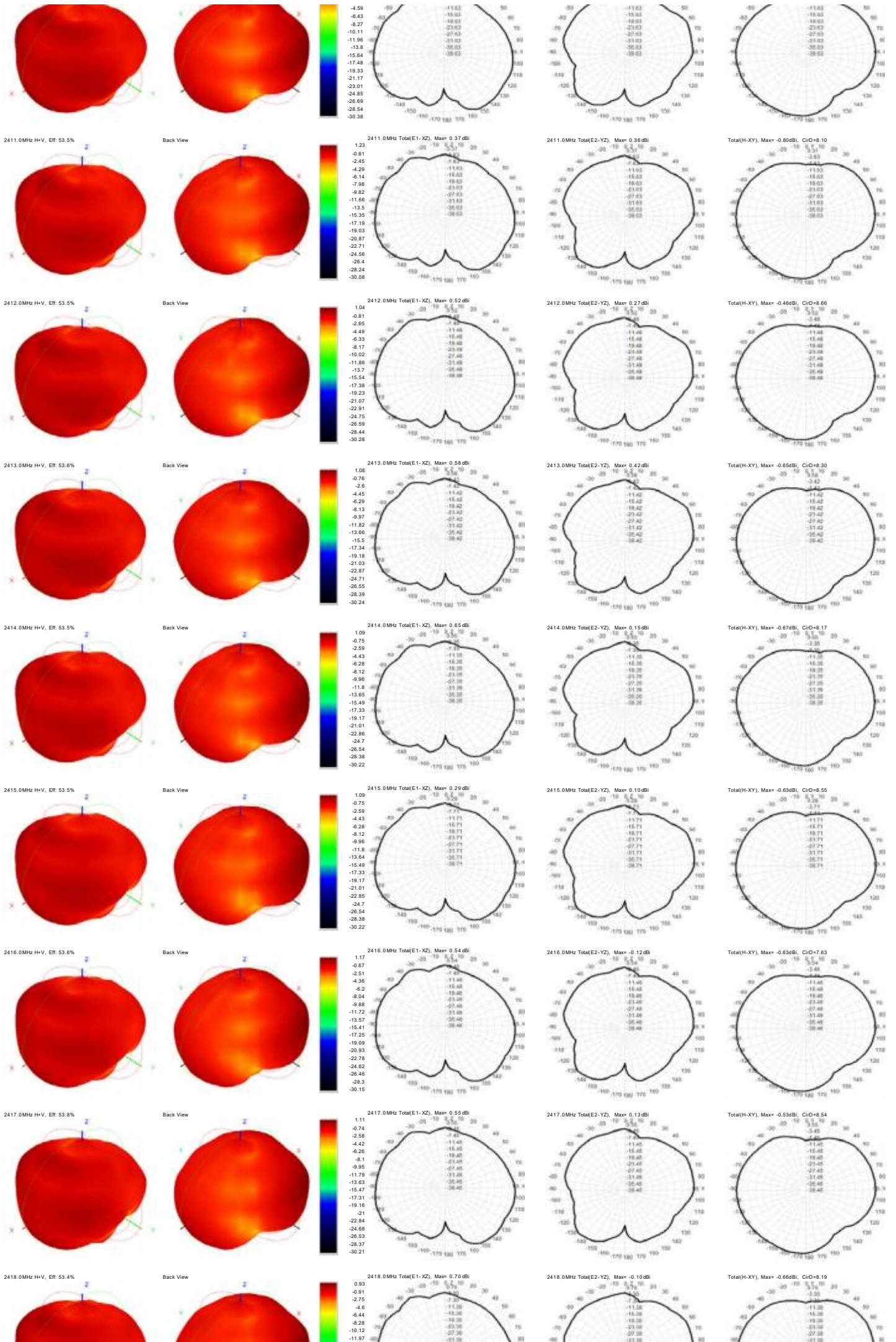


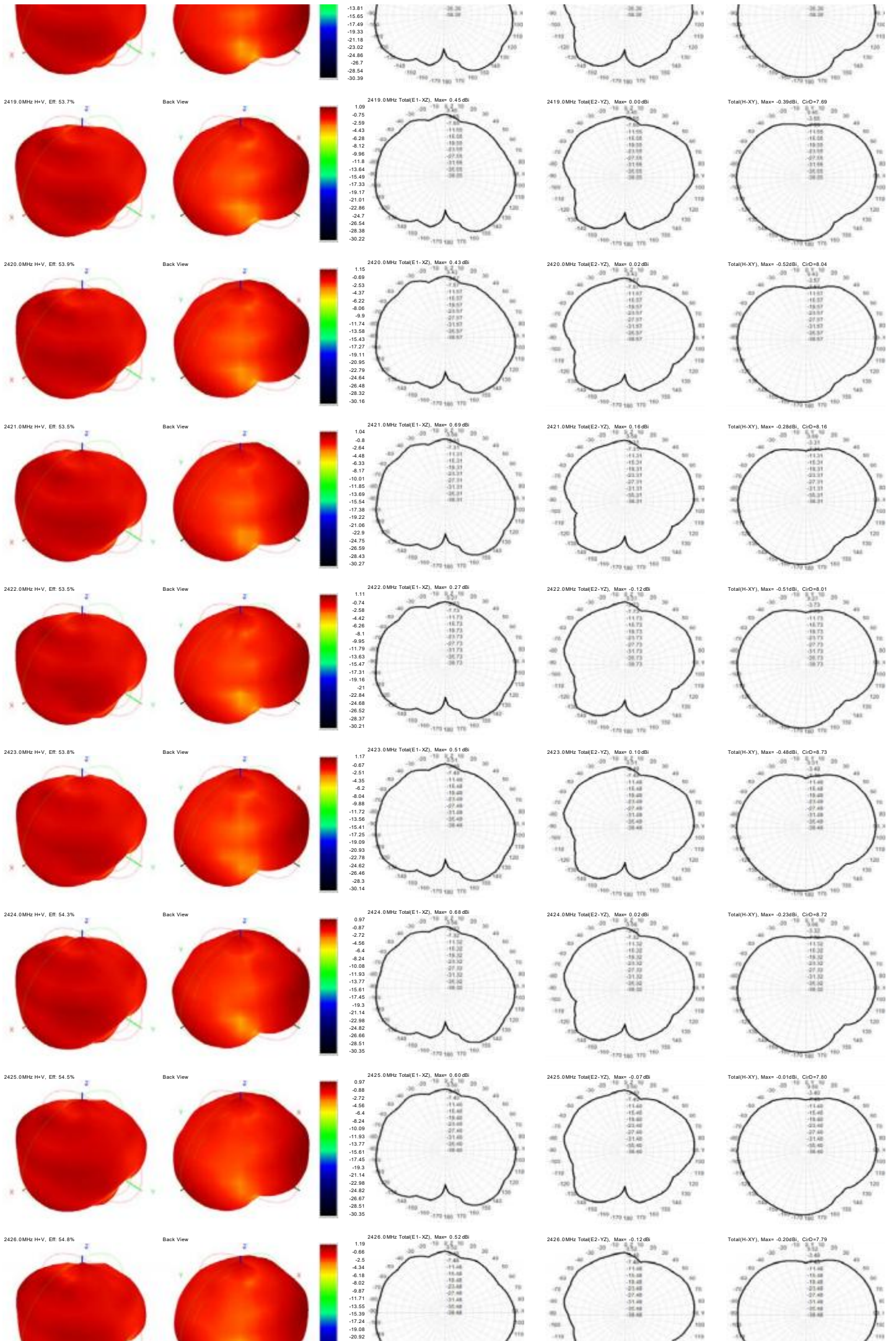
2410.0MHz Total(E2-YZ), Max=0.21dBi

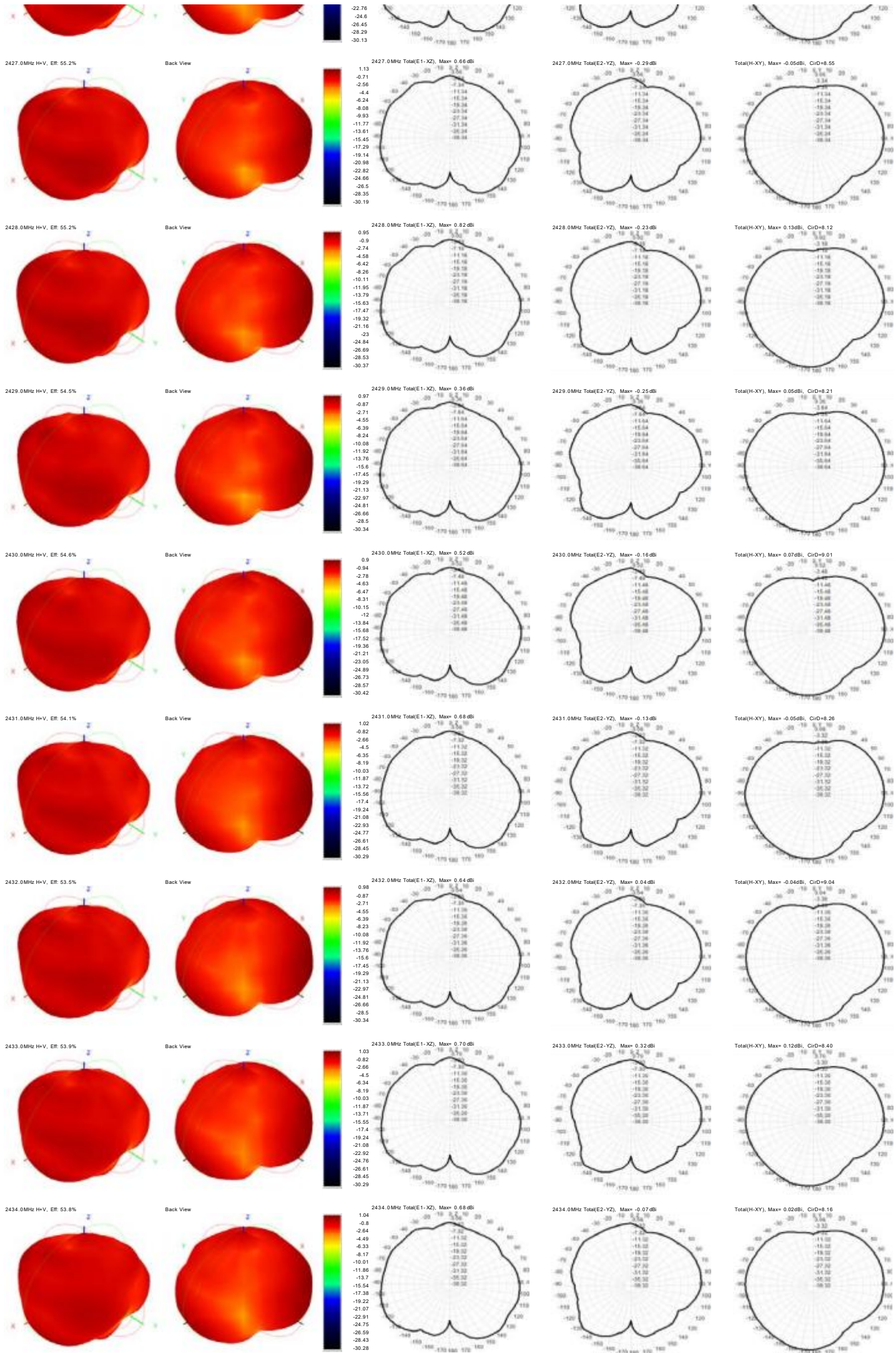


Total(H-XY), Max=-0.59dBi, C/D=6.40



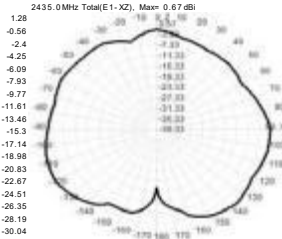
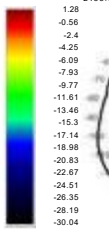
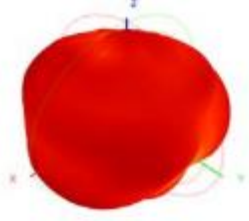




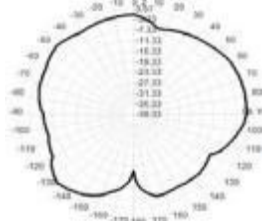


2435.0MHz H-V, Eff: 54.6%

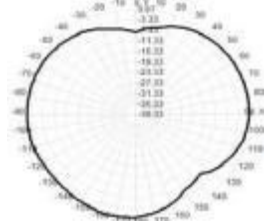
Back View



2435.0MHz Total(E2-YZ), Max= -0.06dBi

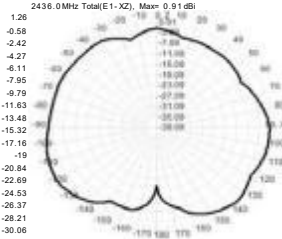
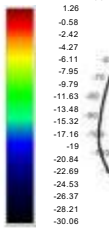
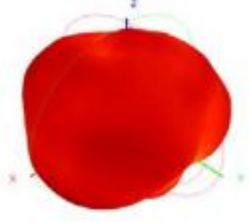


Total(H-XY), Max= 0.01dBi, CirD=8.20

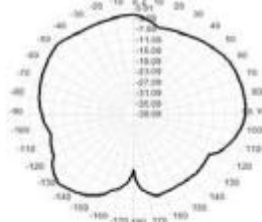


2436.0MHz H-V, Eff: 55.1%

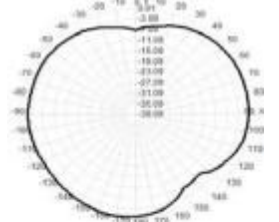
Back View



2436.0MHz Total(E2-YZ), Max= -0.27dBi

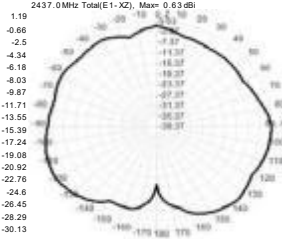
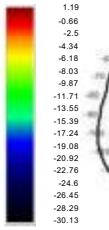
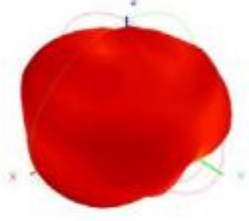


Total(H-XY), Max= 0.20dBi, CirD=7.70

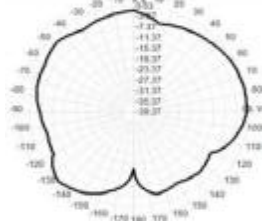


2437.0MHz H-V, Eff: 55.3%

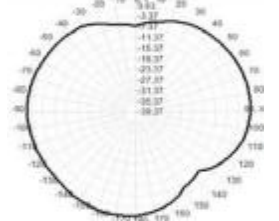
Back View



2437.0MHz Total(E2-YZ), Max= -0.14dBi

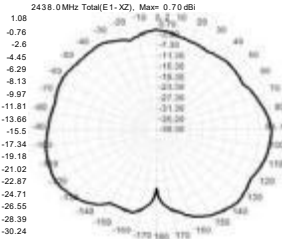
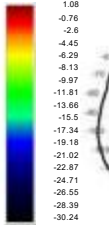
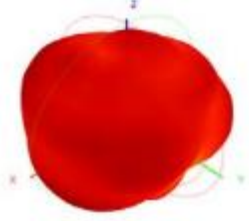


Total(H-XY), Max= 0.52dBi, CirD=8.65

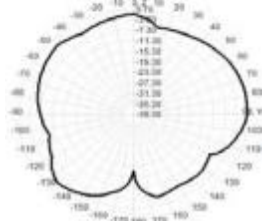


2438.0MHz H-V, Eff: 55.3%

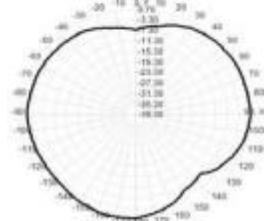
Back View



2438.0MHz Total(E2-YZ), Max= 0.18dBi

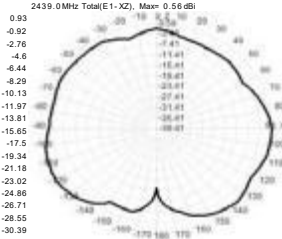
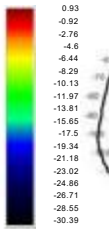
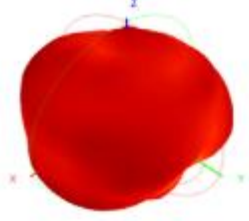


Total(H-XY), Max= 0.42dBi, CirD=7.93

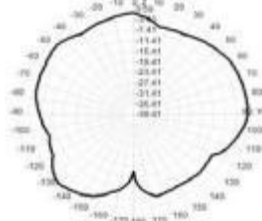


2439.0MHz H-V, Eff: 55.1%

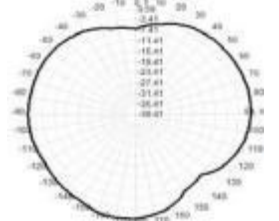
Back View



2439.0MHz Total(E2-YZ), Max= -0.18dBi

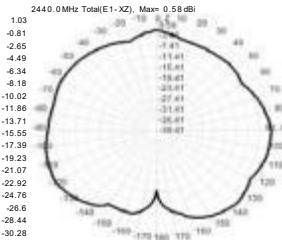
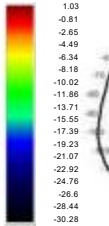
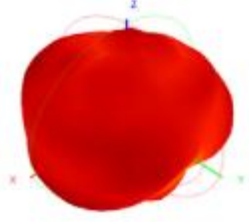


Total(H-XY), Max= 0.59dBi, CirD=7.70

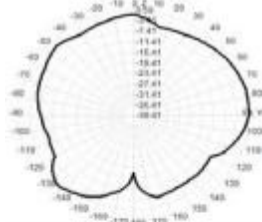


2440.0MHz H-V, Eff: 54.8%

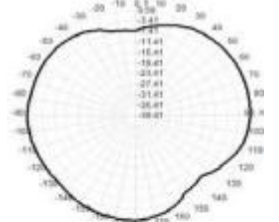
Back View



2440.0MHz Total(E2-YZ), Max= 0.59dBi

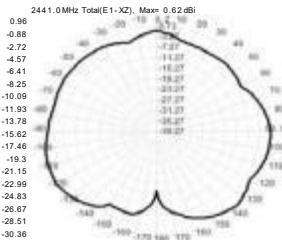
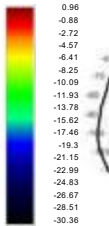
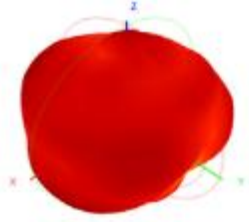


Total(H-XY), Max= 0.46dBi, CirD=7.84

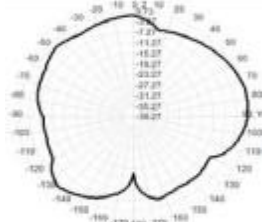


2441.0MHz H-V, Eff: 55.2%

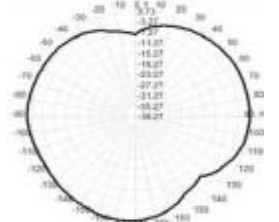
Back View



2441.0MHz Total(E2-YZ), Max= 0.73dBi

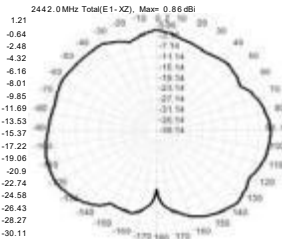
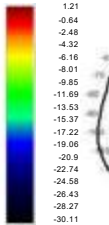
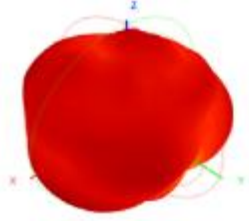


Total(H-XY), Max= 0.41dBi, CirD=8.49

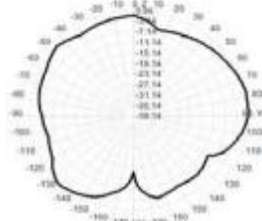


2442.0MHz H-V, Eff: 55.6%

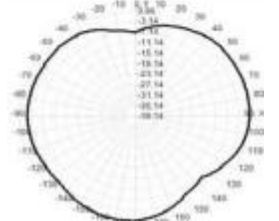
Back View



2442.0MHz Total(E2-YZ), Max= 0.73dBi



Total(H-XY), Max= 0.50dBi, CirD=8.04



2443.0MHz H-V, Eff: 56.5%

Back View

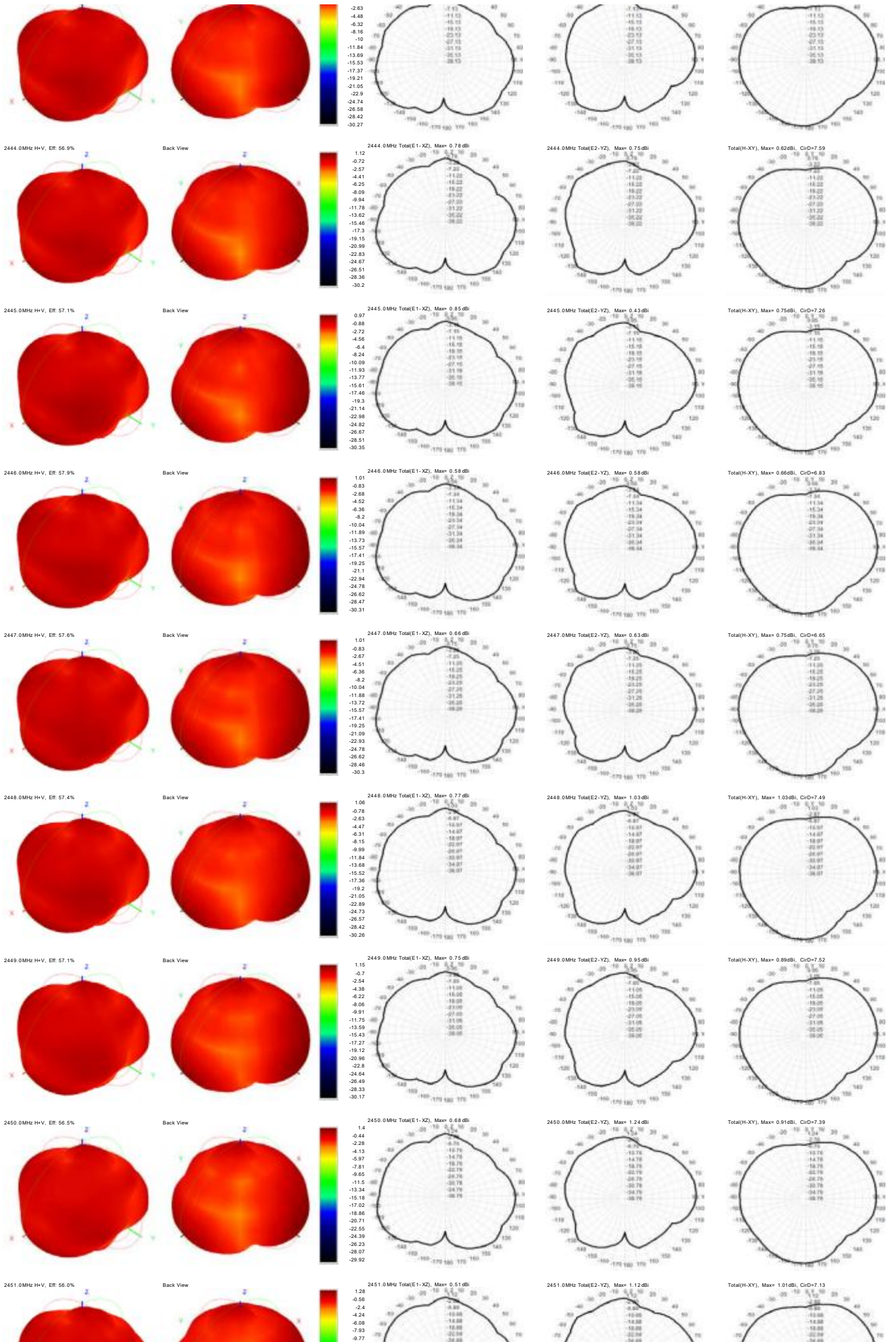


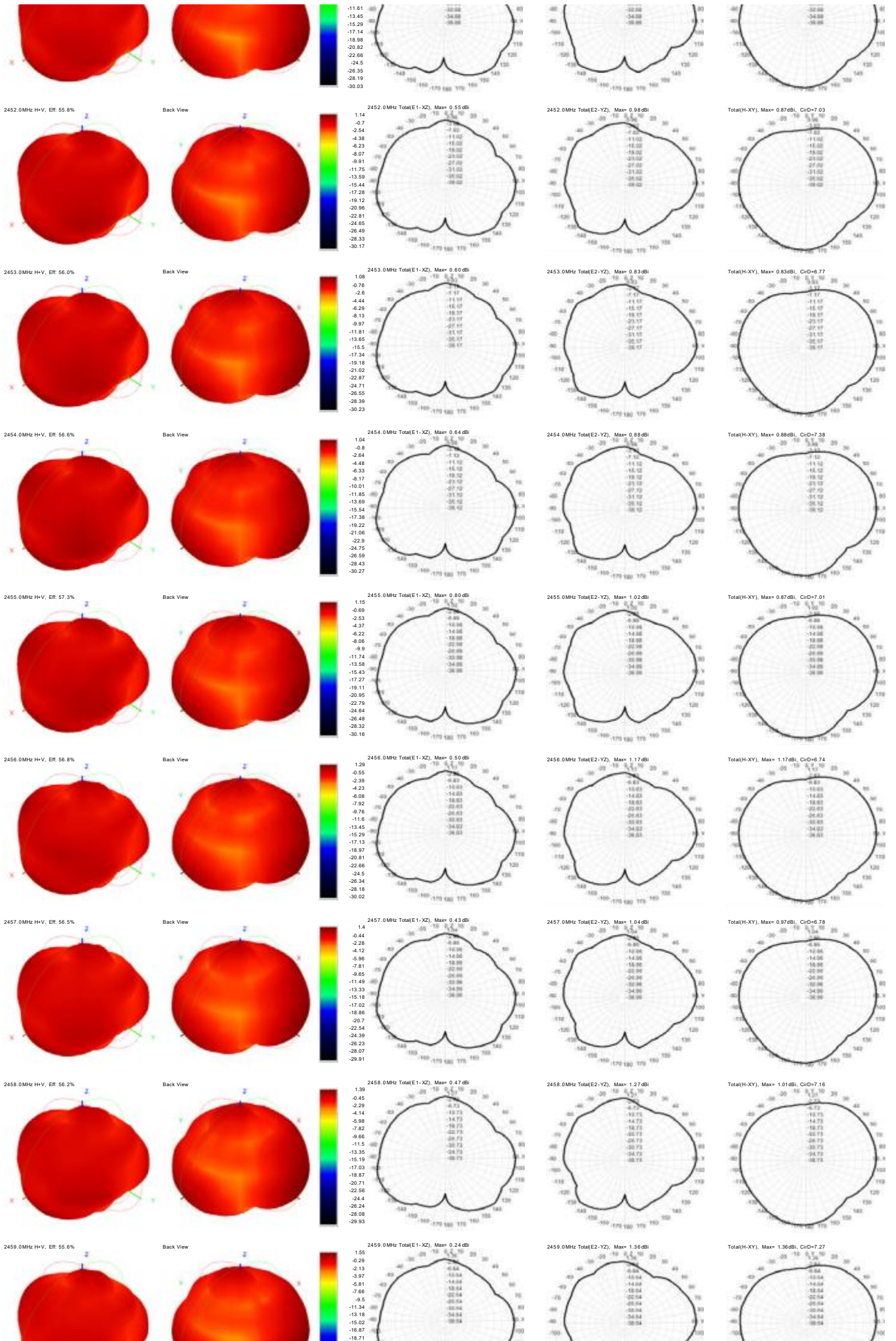
2443.0MHz Total(E2-YZ), Max= 0.87dBi

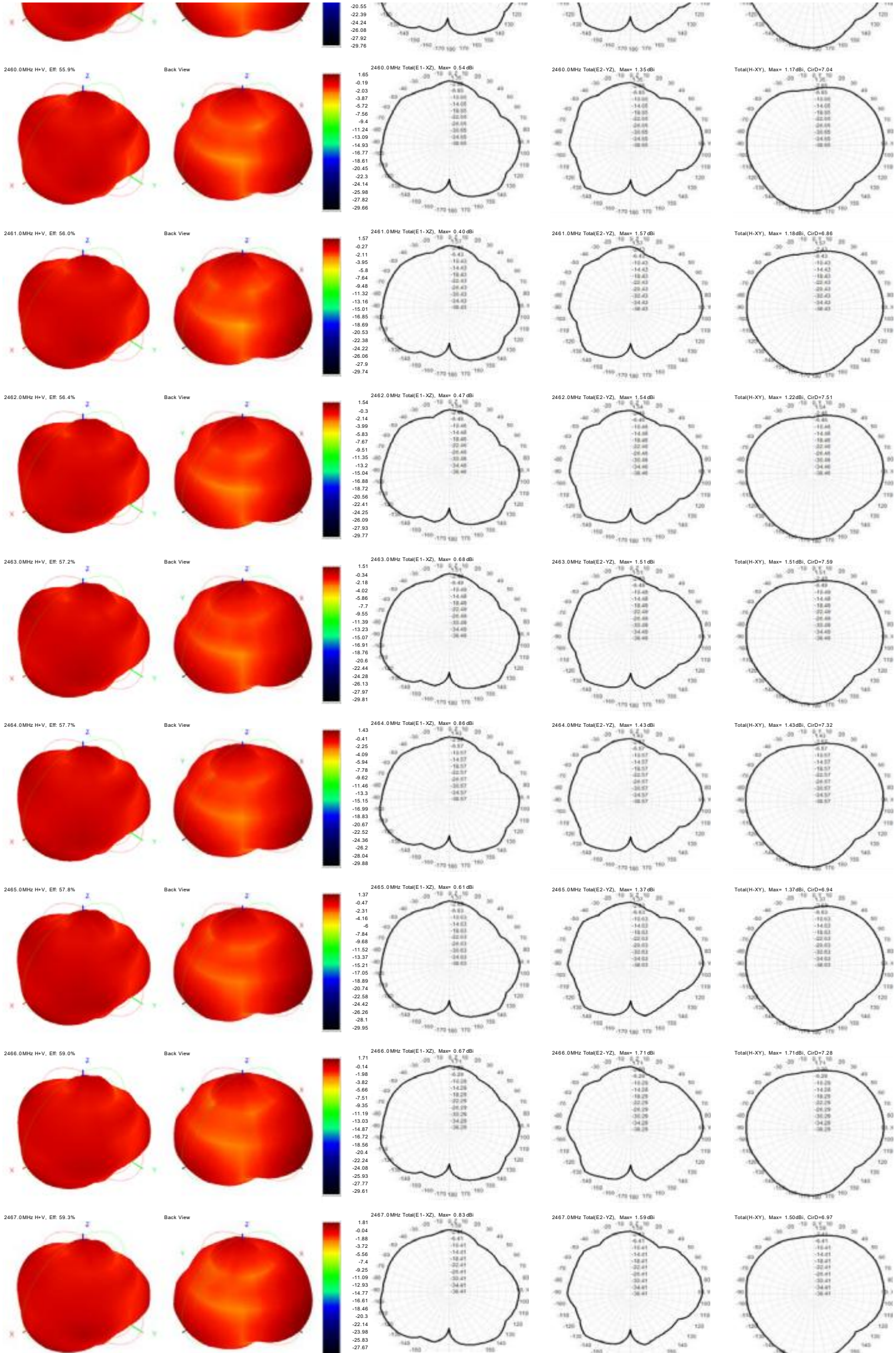


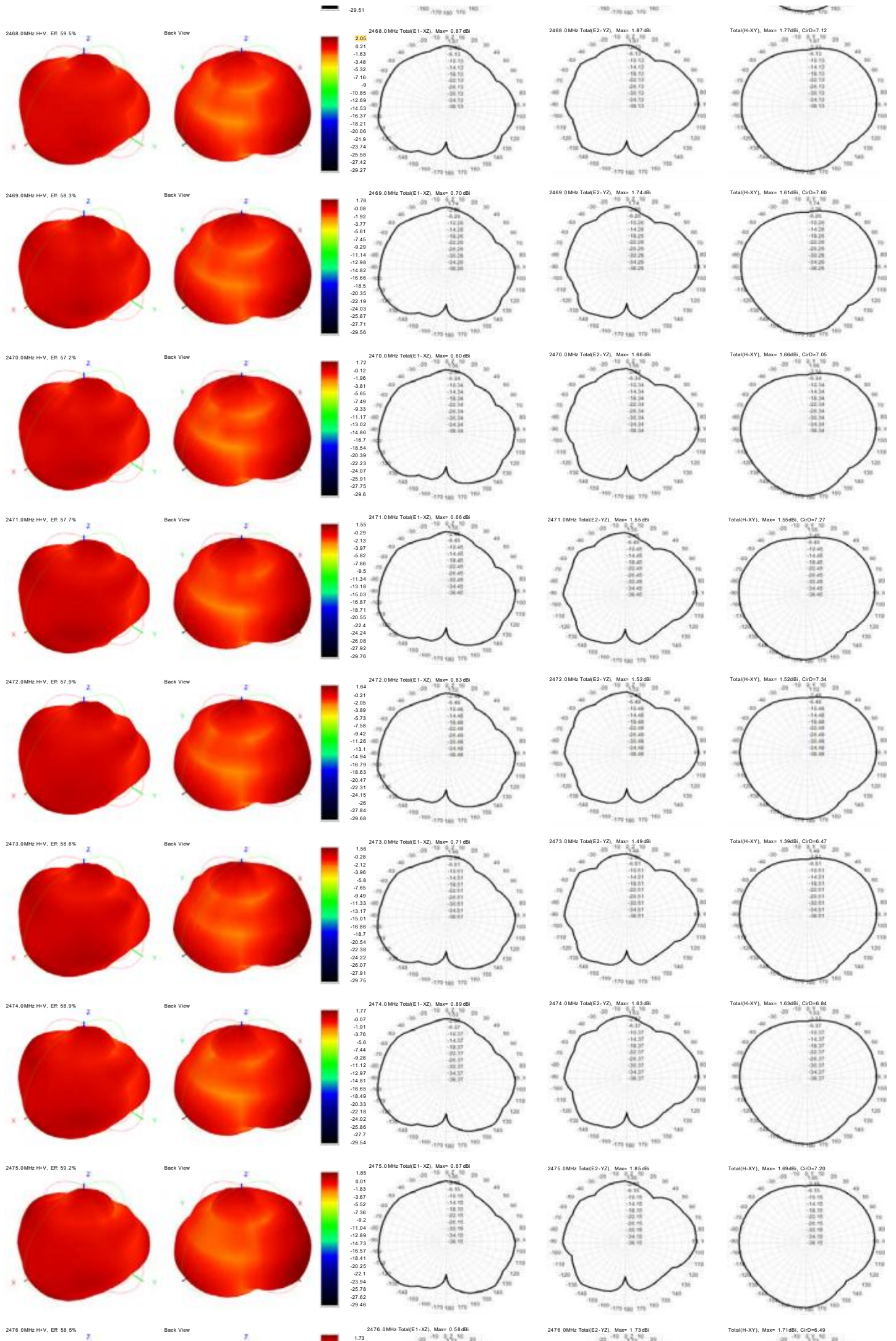
Total(H-XY), Max= 0.58dBi, CirD=7.06

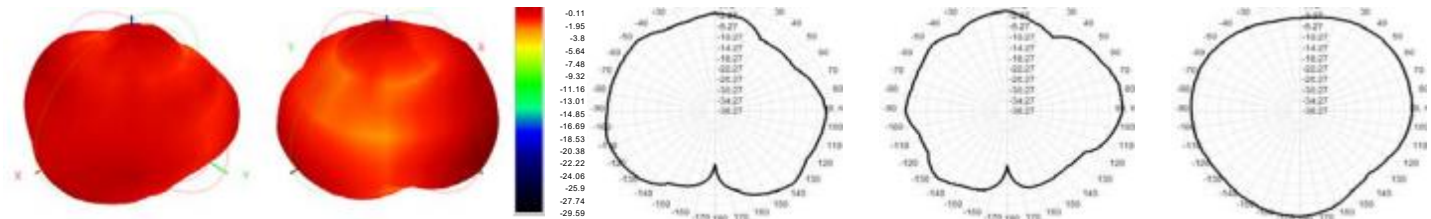












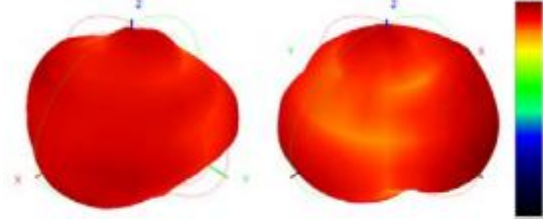
2477.0 MHz H+V, EIR: 57.4%

Back View

2477.0 MHz Total(E1+XZ), Max= 0.64 dBi

2477.0 MHz Total(E2+YZ), Max= 1.73 dBi

Total(H-XY), Max= 1.60 dBi, CirD=0.86



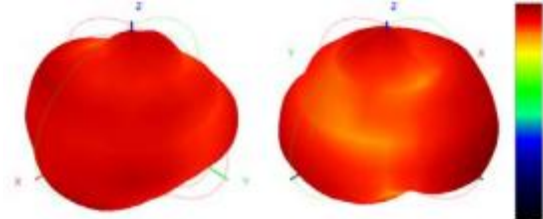
2478.0 MHz H+V, EIR: 56.7%

Back View

2478.0 MHz Total(E1+XZ), Max= 0.54 dBi

2478.0 MHz Total(E2+YZ), Max= 1.84 dBi

Total(H-XY), Max= 1.84 dBi, CirD=7.37



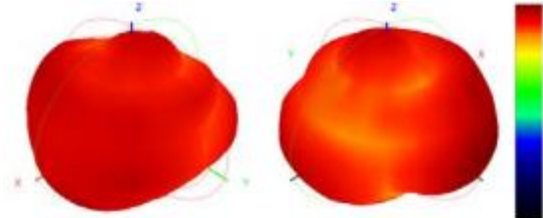
2479.0 MHz H+V, EIR: 56.6%

Back View

2479.0 MHz Total(E1+XZ), Max= 0.42 dBi

2479.0 MHz Total(E2+YZ), Max= 1.87 dBi

Total(H-XY), Max= 1.43 dBi, CirD=7.38



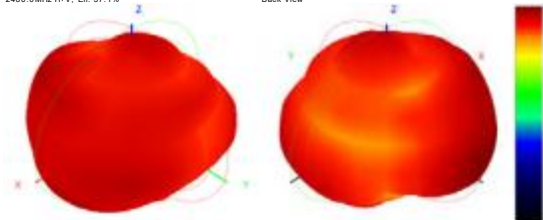
2480.0 MHz H+V, EIR: 57.1%

Back View

2480.0 MHz Total(E1+XZ), Max= 0.70 dBi

2480.0 MHz Total(E2+YZ), Max= 1.99 dBi

Total(H-XY), Max= 1.71 dBi, CirD=7.19



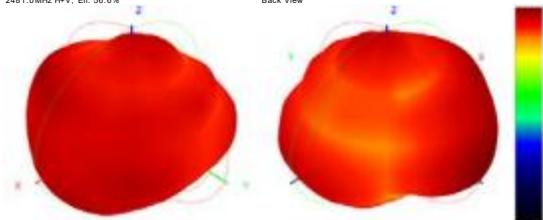
2481.0 MHz H+V, EIR: 56.6%

Back View

2481.0 MHz Total(E1+XZ), Max= 0.57 dBi

2481.0 MHz Total(E2+YZ), Max= 1.78 dBi

Total(H-XY), Max= 1.72 dBi, CirD=7.62



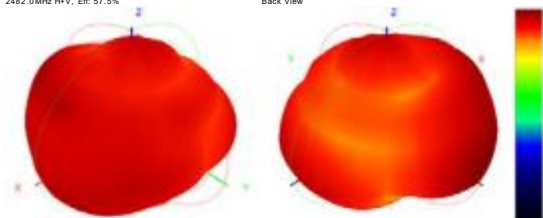
2482.0 MHz H+V, EIR: 57.5%

Back View

2482.0 MHz Total(E1+XZ), Max= 0.81 dBi

2482.0 MHz Total(E2+YZ), Max= 2.00 dBi

Total(H-XY), Max= 1.65 dBi, CirD=7.18



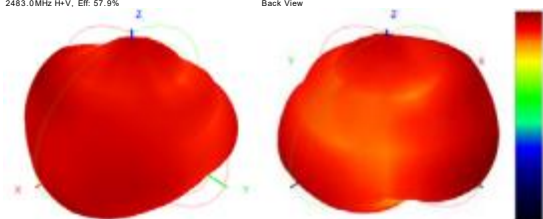
2483.0 MHz H+V, EIR: 57.9%

Back View

2483.0 MHz Total(E1+XZ), Max= 0.58 dBi

2483.0 MHz Total(E2+YZ), Max= 1.54 dBi

Total(H-XY), Max= 1.54 dBi, CirD=6.64



2484.0 MHz H+V, EIR: 58.8%

Back View

2484.0 MHz Total(E1+XZ), Max= 1.01 dBi

2484.0 MHz Total(E2+YZ), Max= 1.79 dBi

Total(H-XY), Max= 1.32 dBi, CirD=6.64

