

# Report for Broadcom

Model: 20220623H31 V1.2

**Godox Photo Equipment Co.,Ltd.**

4th Floor of Building 1, 1st to 4 th Floor of Building 2, 4th Floor of Building 3,1st to 4th Floor of Building 4, Yaochuan Industrial Zone, Tangwei Community,  
Fuhai Street, Bao'an District, Shenzhen 518103,China

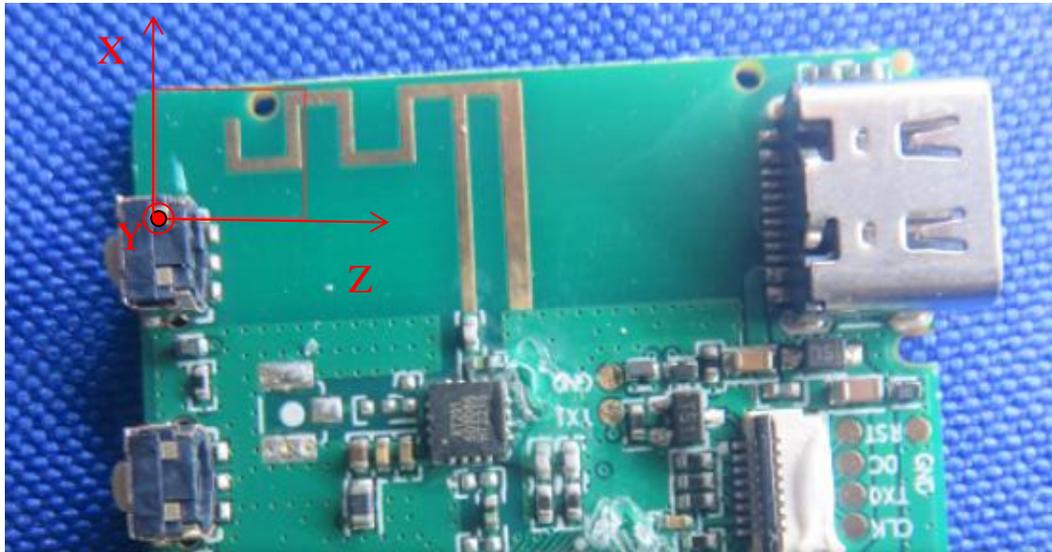
## Tested Products.

- Antenna 1: integrated antenna.
  - Frequency = 2.402GHz.
  - Frequency = 2.441GHz.
  - Frequency = 2.480GHz.

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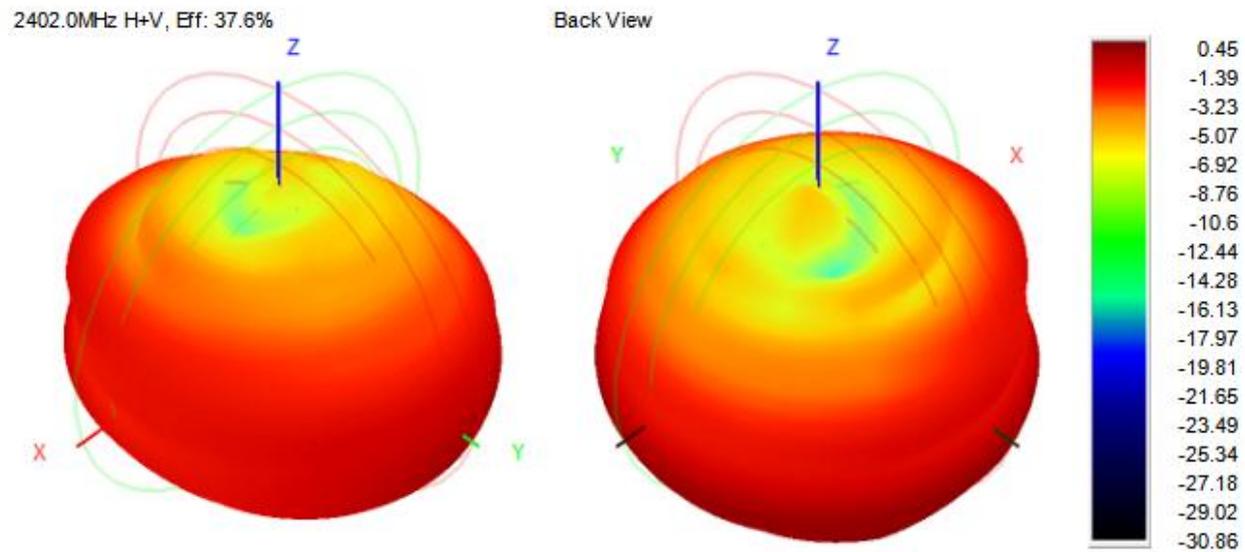
# Coordinate System Reference: Antenna-RX



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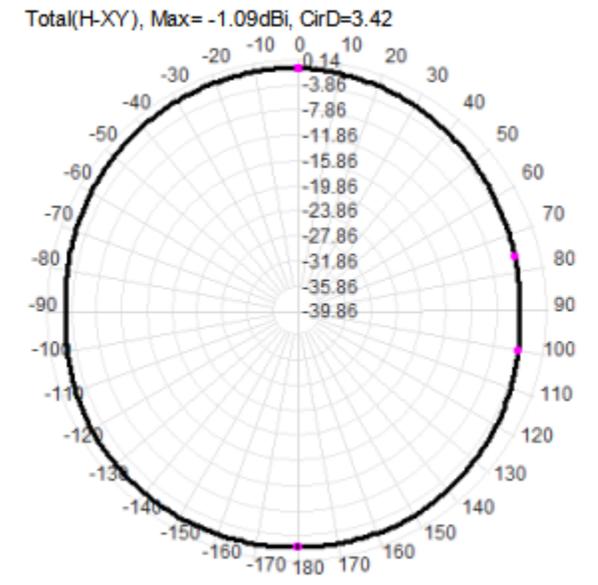
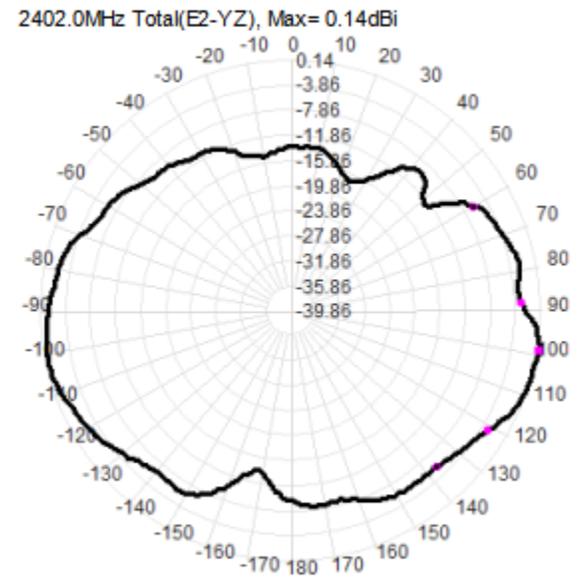
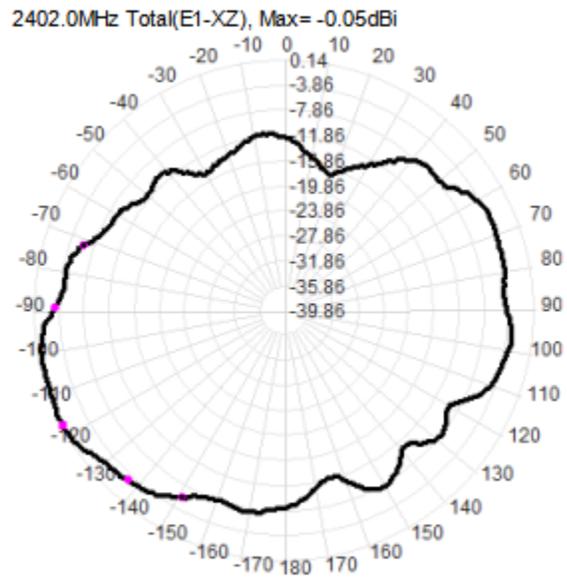
# Radiation pattern: Antenna-RX 3D Pattern at $f = 2.402\text{GHz}$



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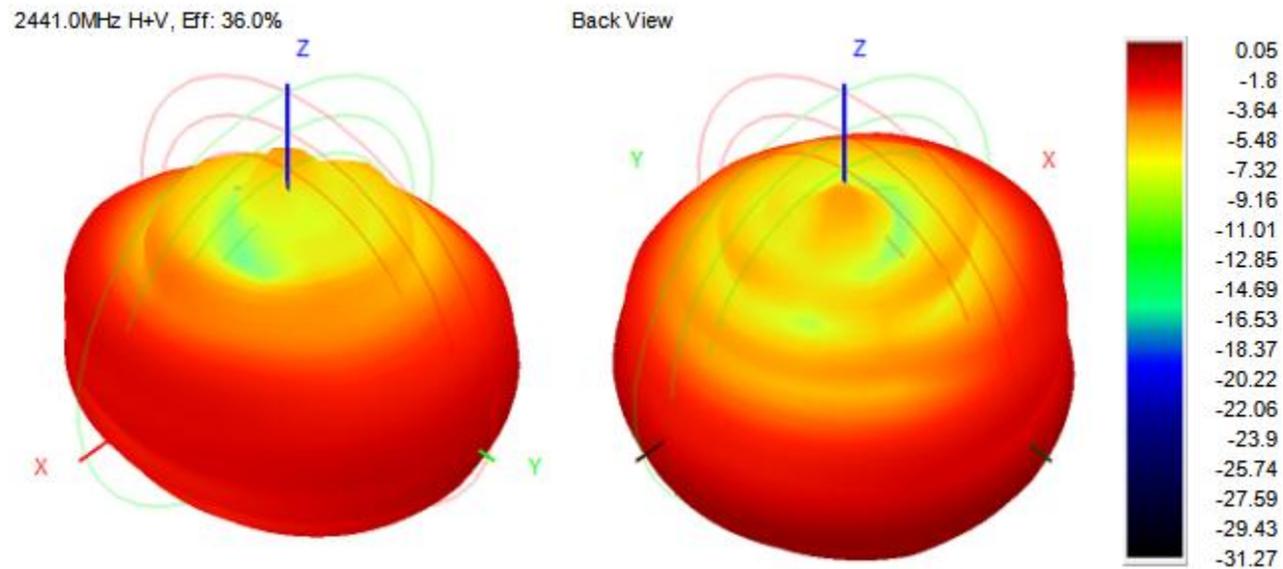
# Radiation pattern: Antenna-RX 2D Pattern at $f = 2.402\text{GHz}$



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# Radiation pattern: Antenna-RX 3D Pattern at $f = 2.441\text{GHz}$

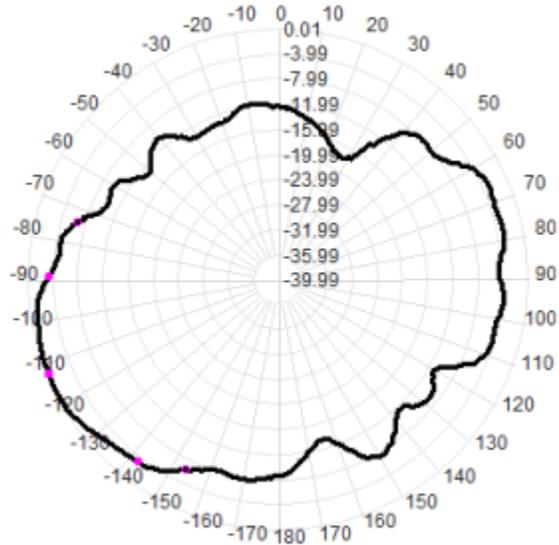


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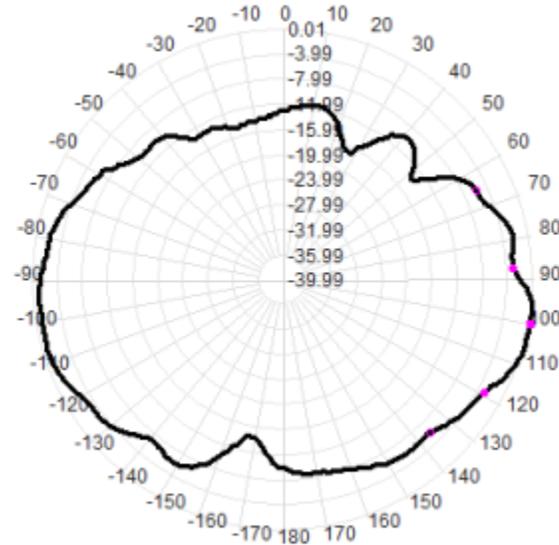
4th Floor of Building 1, 1st to 4 th Floor of Building 2, 4th Floor of Building 3, 1st to 4th Floor of Building 4, Yaochuan Industrial Zone, Tangwei Community,  
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# Radiation pattern: Antenna-RX 2D Pattern at $f = 2.441\text{GHz}$

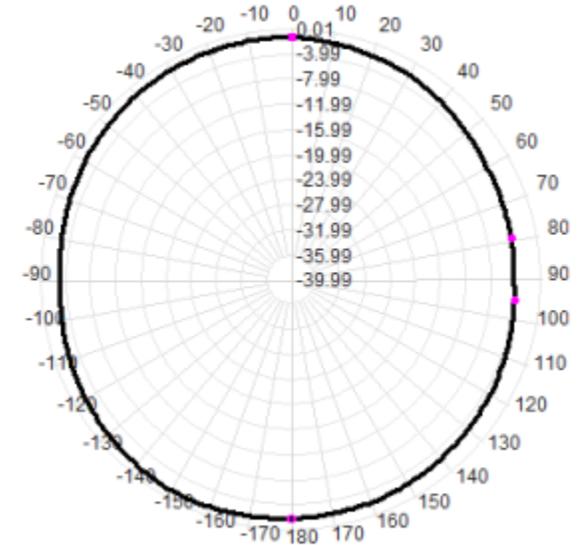
2441.0MHz Total(E1-XZ), Max=-0.34dBi



2441.0MHz Total(E2-YZ), Max= 0.01dBi



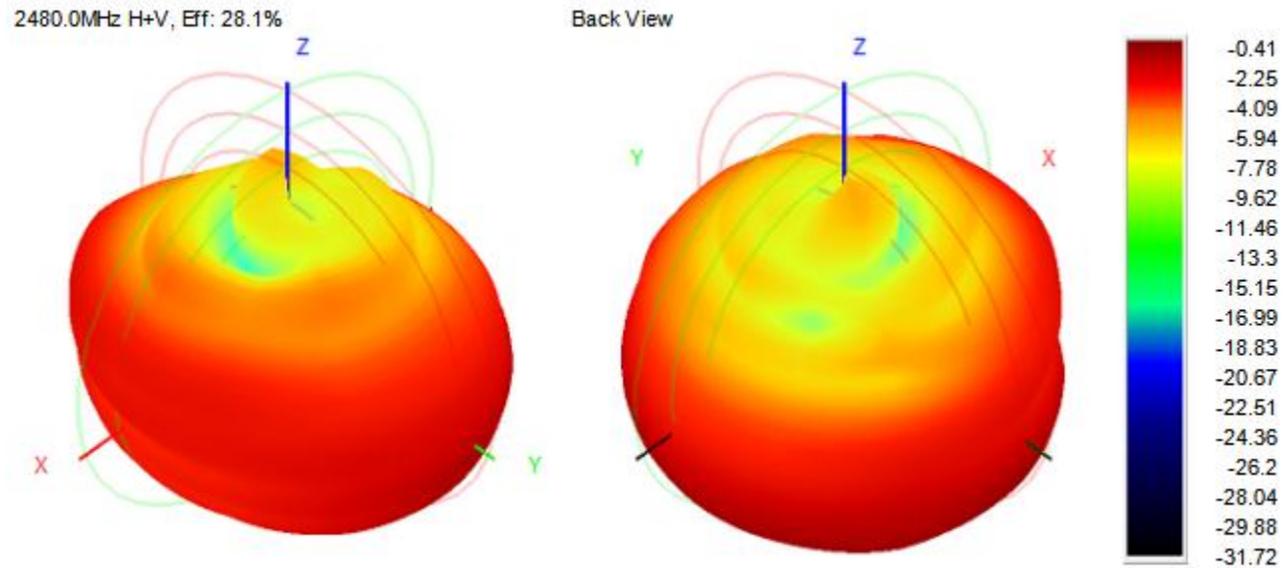
Total(H-XY), Max=-1.32dBi, CirD=3.20



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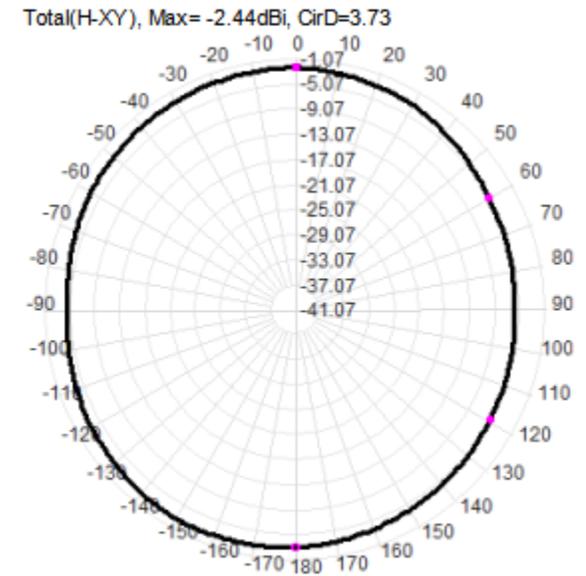
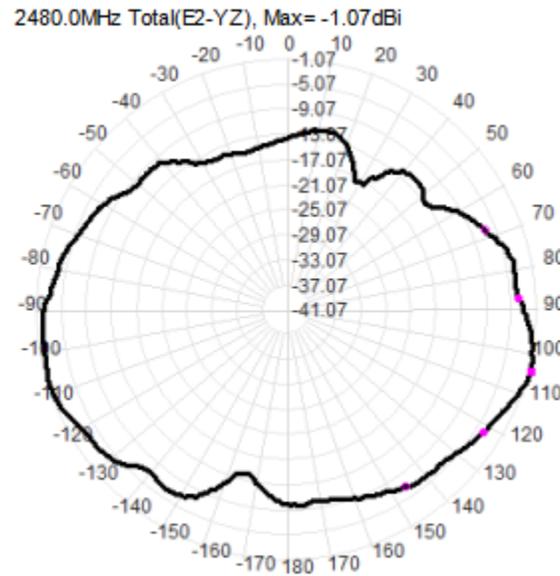
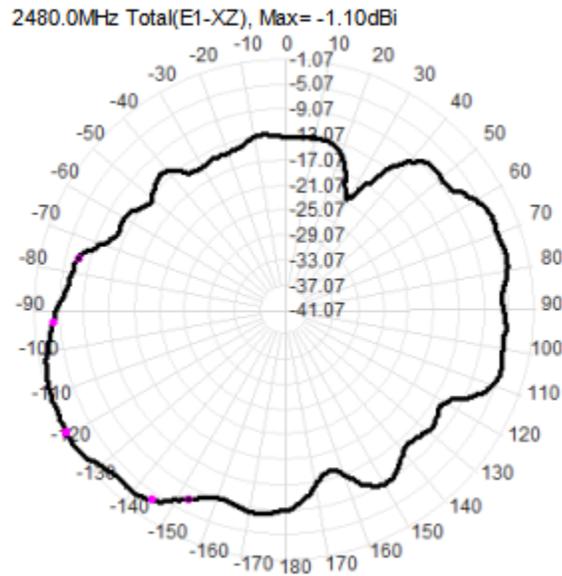
# Radiation pattern: Antenna-RX 3D Pattern at $f = 2.48\text{GHz}$



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# Radiation pattern: Antenna-RX 2D Pattern at $f = 2.48\text{GHz}$



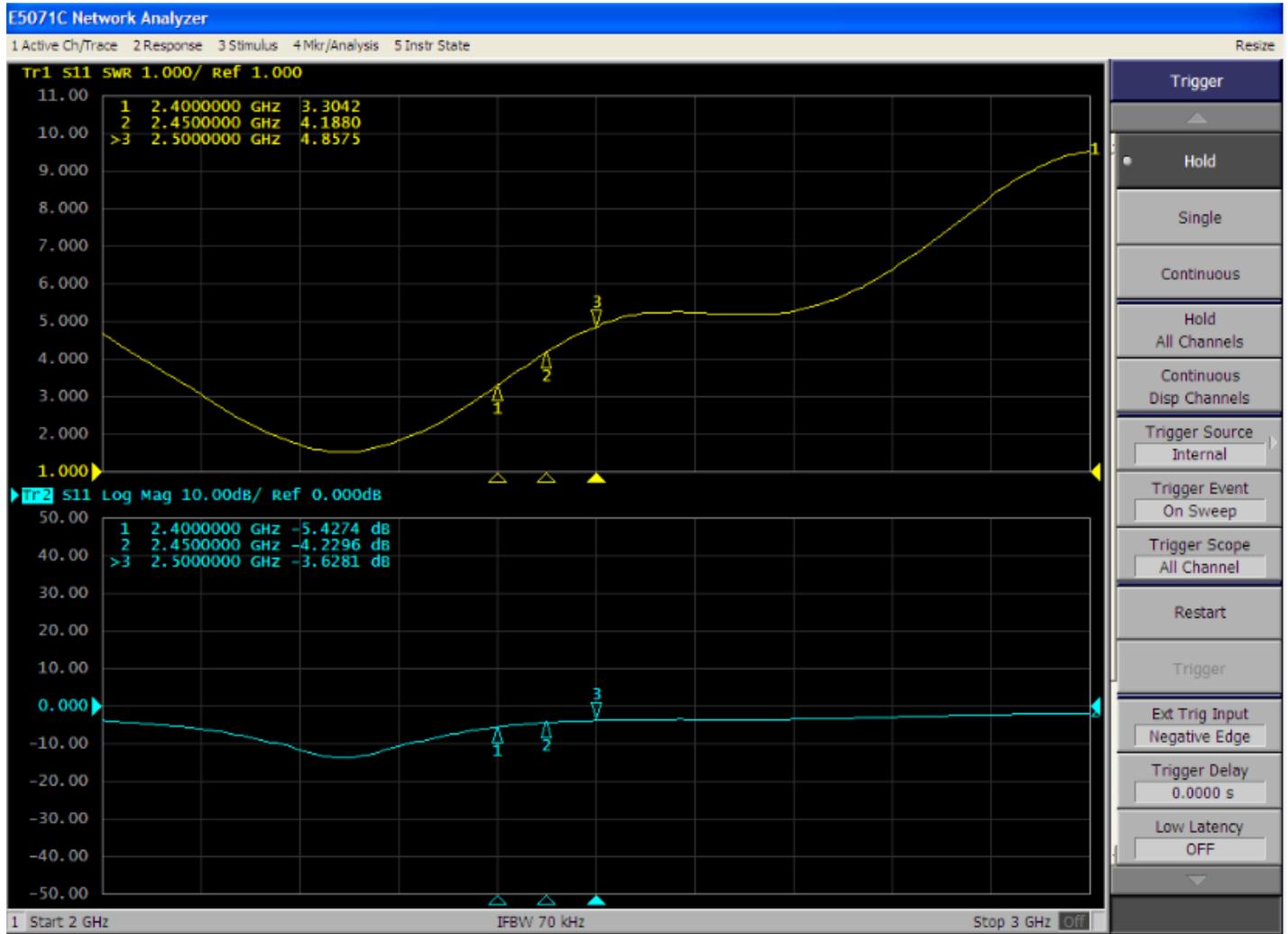
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# Return Loss: Antenna 1

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# Measurements summary

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2402.0	2410.0	2420.0	2430.0	2441.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	0.45	0.40	0.22	0.22	0.05	-0.15	-0.31	-0.41	-0.41	-0.66	-0.84
Efficiency (%)	37.58	37.26	36.50	37.20	35.96	33.54	30.78	28.69	28.08	26.48	25.13
Directivity (dB)	4.70	4.68	4.60	4.51	4.49	4.60	4.81	5.02	5.11	5.11	5.16
Peak Gain Position (Theta)	77.00	77.00	75.00	69.00	72.00	72.00	71.00	71.00	71.00	72.00	73.00
Peak Gain Position (Phi)	240.00	240.00	240.00	120.00	240.00	240.00	240.00	240.00	240.00	240.00	240.00
Efficiency ThetaPol (%)	32.64	32.27	31.49	32.11	30.83	28.59	26.16	24.18	23.46	22.09	20.82
Efficiency PhiPol (%)	4.94	4.98	5.01	5.09	5.13	4.96	4.62	4.50	4.62	4.39	4.31
Upper Hem. Efficiency (%)	12.41	12.14	11.90	12.21	11.80	10.93	9.87	9.01	8.67	8.06	7.57
Lower Hem. Efficiency (%)	25.17	25.11	24.60	24.99	24.16	22.61	20.91	19.68	19.41	18.42	17.56

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