

2. Wi-Fi Main Antenna Specification

Winmate Part Number: 90RF0500001F

2.1. Electrical Characteristics

Frequency(MHz): 2400-2500 / 5150-5850 / 5925-7125

SWR: $\leq 1.66@2400-2500\text{MHz}$

$\leq 2.60@5150-5850\text{MHz}$

$\leq 2.86@5925-7125\text{MHz}$

Return Loss: $\leq -12.1\text{dB}@2400-2500\text{MHz}$

$\leq -6.9\text{dB}@5150-5850\text{MHz}$

$\leq -6.6\text{dB}@5925-7125\text{MHz}$

Peak Gain: $1.24\text{dBi}@2400-2500\text{MHz}$

$2.00\text{dBi}@5150-5850\text{MHz}$

$1.52\text{dBi}@5925-7125\text{MHz}$

Impedance: 50ohm

Polarization: Linear

2.2. Mechanical Characteristics

Cable: $50\Omega \phi 0.81$ RF cable

Connector: MHF

PCB: FR4 /Thickness 0.8mm

2.3. Environmental Characteristics

Operating Temperature: -30°C to 80°C

2.4. Antenna Manufacturer Contact Information

Supplier: Winmate Inc.

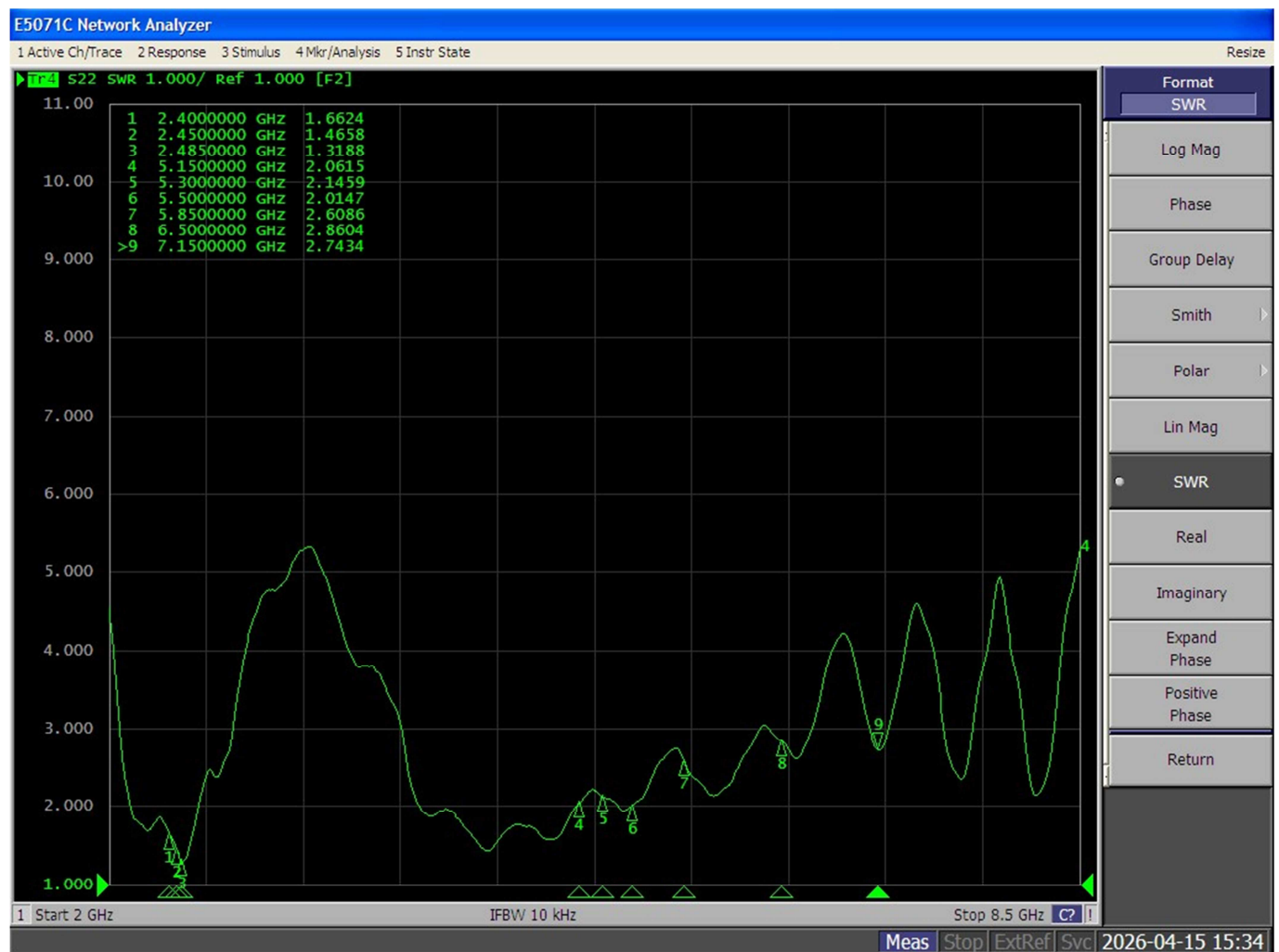
Address: No. 18, Zhongxing S. St., Sanchong Dist., New Taipei City 241017, Taiwan, R.O.C.

Phone Number: +886-2-8511-0288

Website: www.winmate.com

2.4. RF Performance Characteristics

2.4.1. SWR



2.4.2. Return Loss



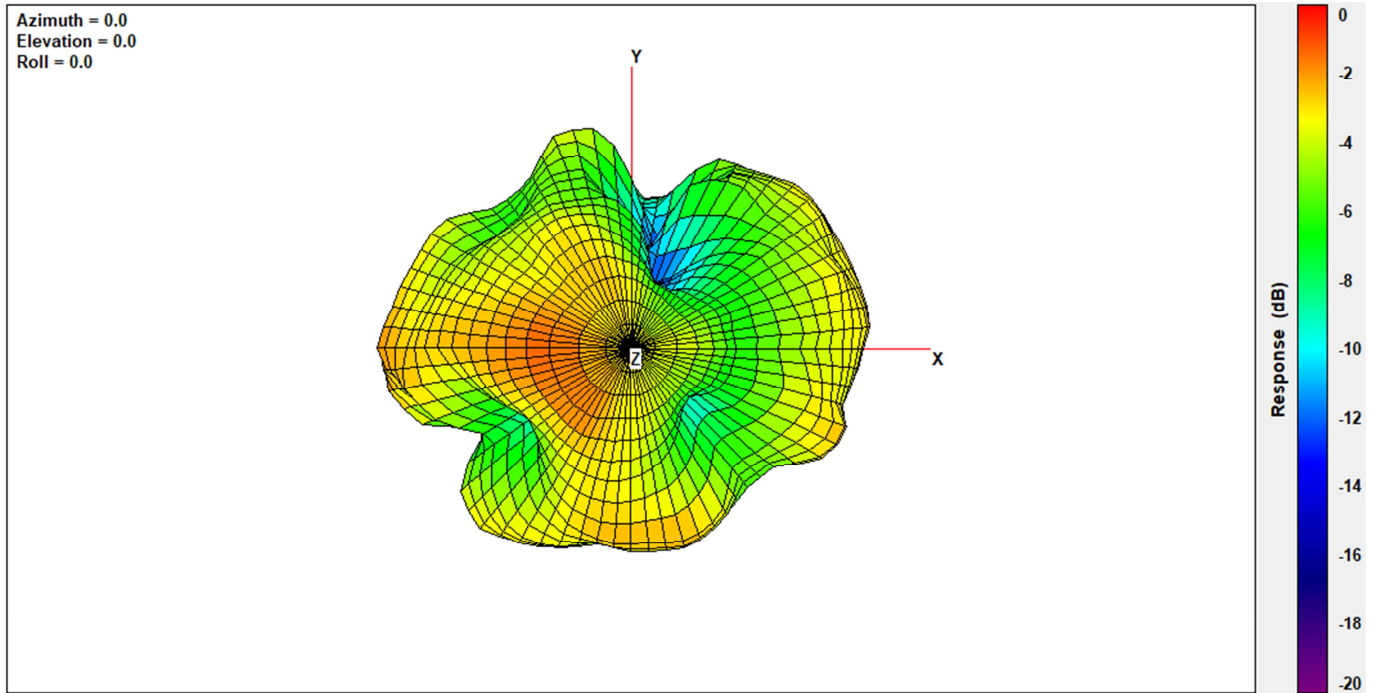
2.4.3. Gain / Efficiency

Frequency	2400	2450	2484	2500	5150	5250	5350	5470	5600	5725
Directivity (dBi)	4.22	4.17	4.94	5.14	5.51	5.20	5.58	5.96	5.67	4.97
Efficiency (dB)	-4.70	-4.04	-3.70	-4.10	-2.58	-2.46	-2.97	-2.96	-3.02	-3.64
Efficiency (%)	33.87	39.43	42.68	38.93	55.20	56.70	50.43	50.55	49.90	43.29
Peak Gain (dBi)	-0.48	0.13	1.24	1.04	1.93	1.74	1.61	2.00	1.65	1.33

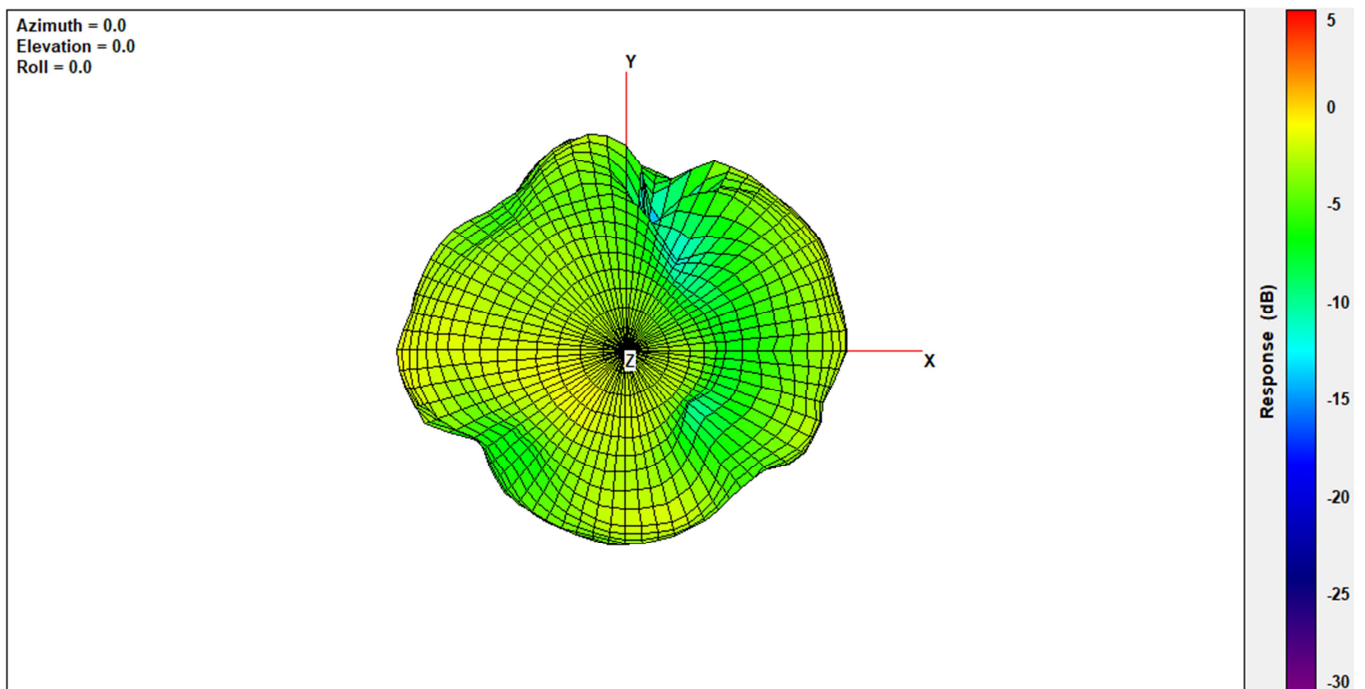
Frequency	5785	5850	5895	5925	6000	6125	6225	6325	6425	6525
Directivity (dBi)	4.96	4.59	5.14	5.12	5.26	5.06	5.40	4.74	5.61	5.85
Efficiency (dB)	-4.11	-3.60	-3.62	-4.09	-4.00	-4.25	-4.70	-5.82	-6.15	-5.69
Efficiency (%)	38.83	43.62	43.43	39.03	39.82	37.54	33.87	26.16	24.29	26.96
Peak Gain (dBi)	0.85	0.99	1.52	1.04	1.26	0.81	0.70	-1.08	-0.54	0.15

Frequency	6625	6725	6875	6925	7000	7125				
Directivity (dBi)	5.97	6.28	6.08	5.84	5.15	5.85				
Efficiency (dB)	-5.76	-5.42	-6.36	-7.03	-6.96	-7.80				
Efficiency (%)	26.52	28.72	23.12	19.83	20.15	16.61				
Peak Gain (dBi)	0.21	0.86	-0.28	-1.19	-1.81	-1.94				

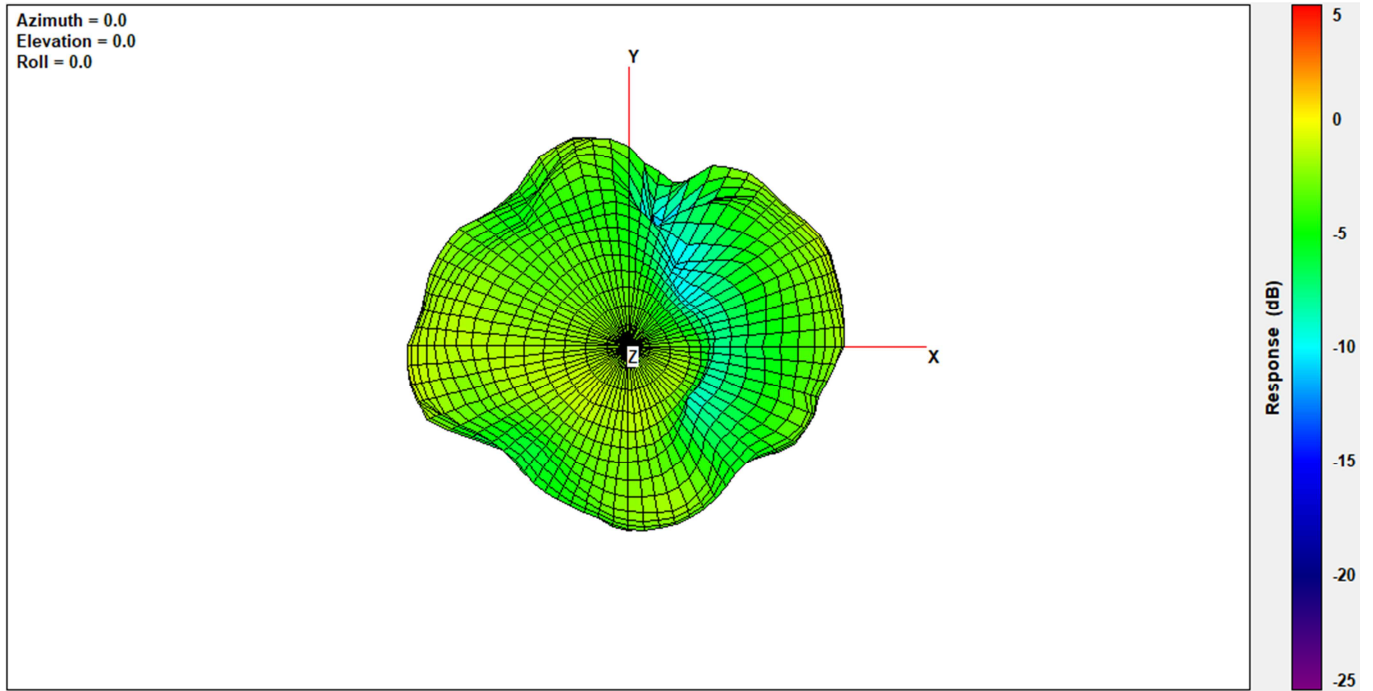
2400MHz



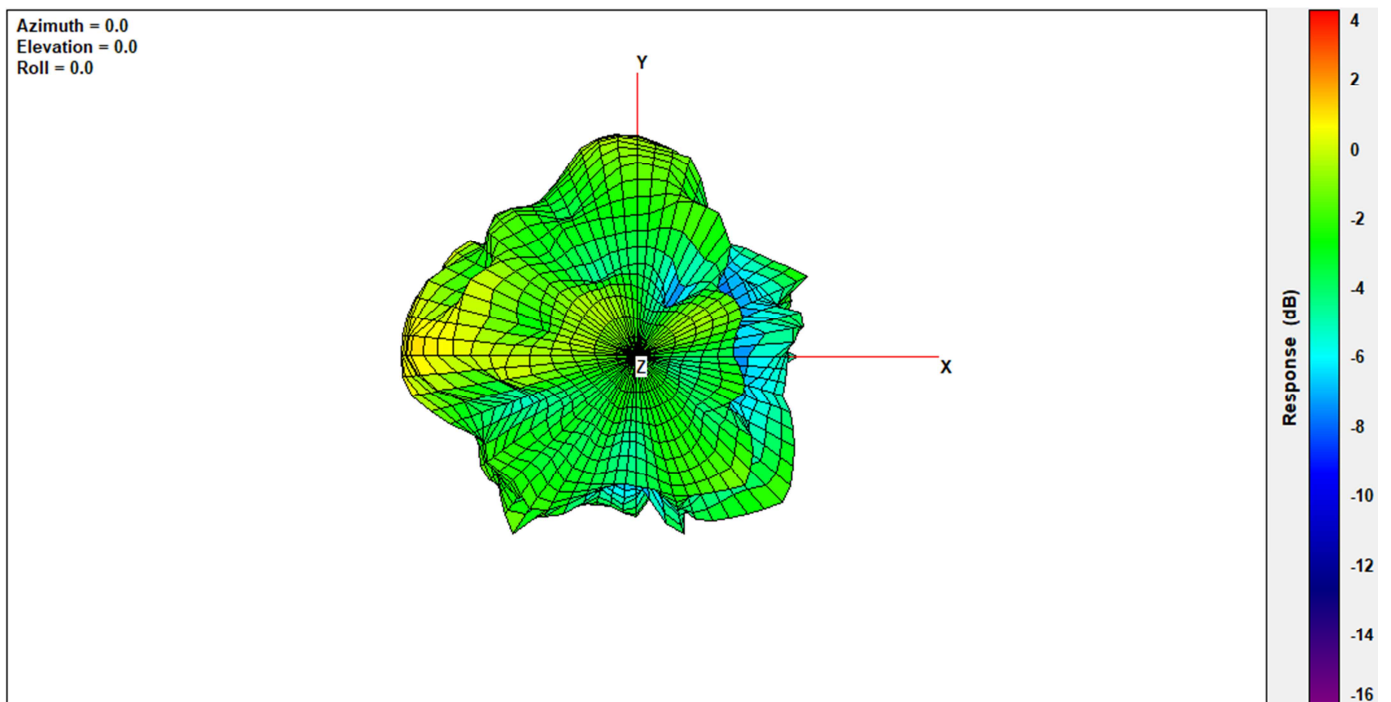
2450MHz



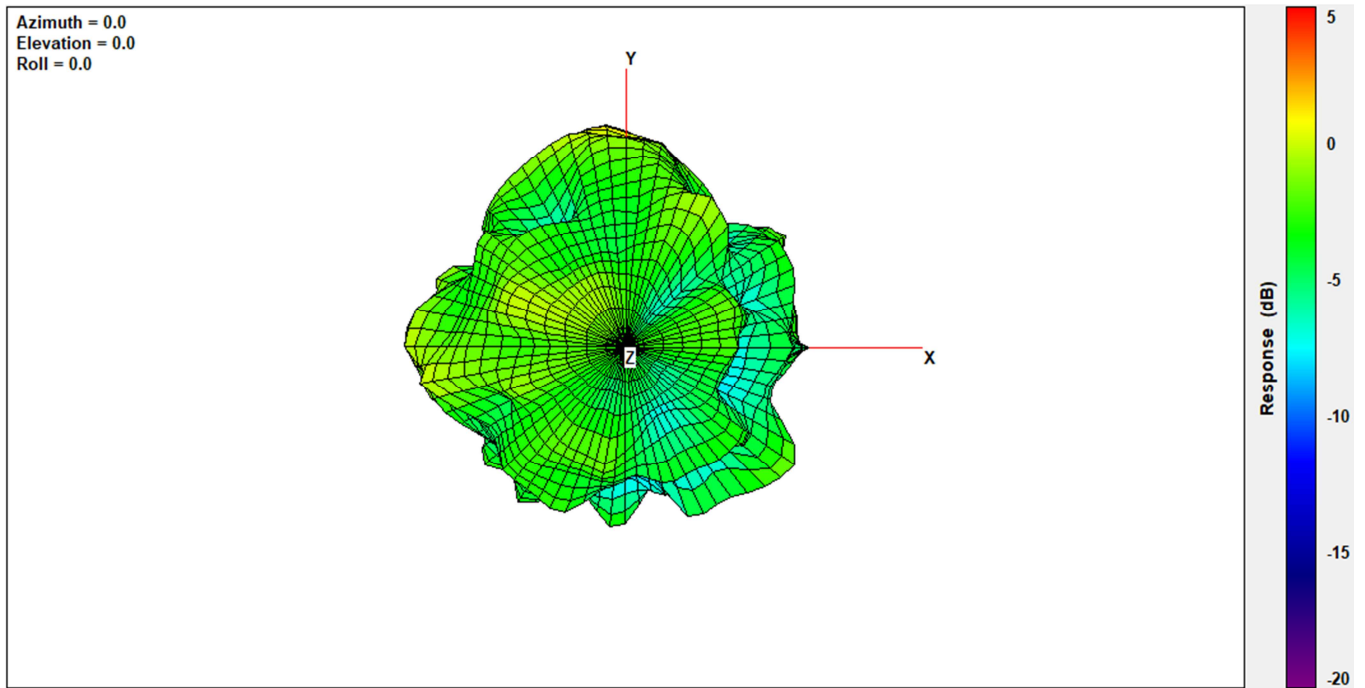
2483MHz



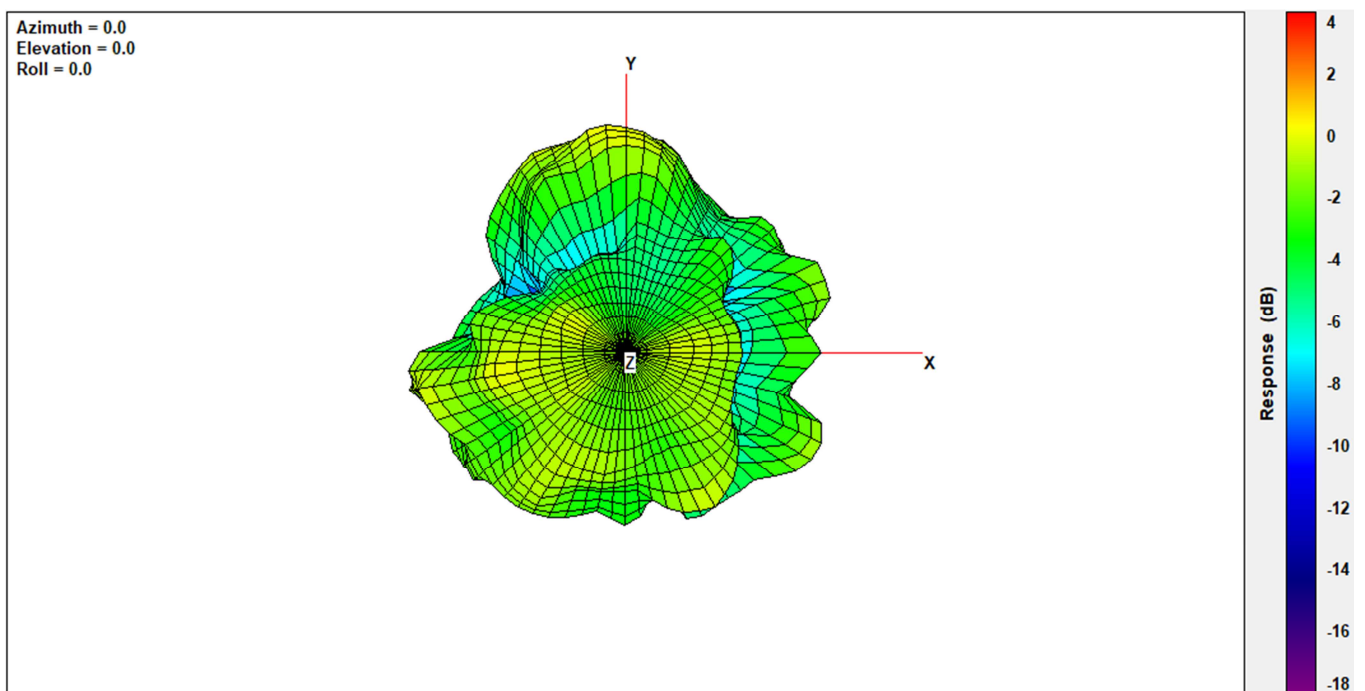
5150MHz



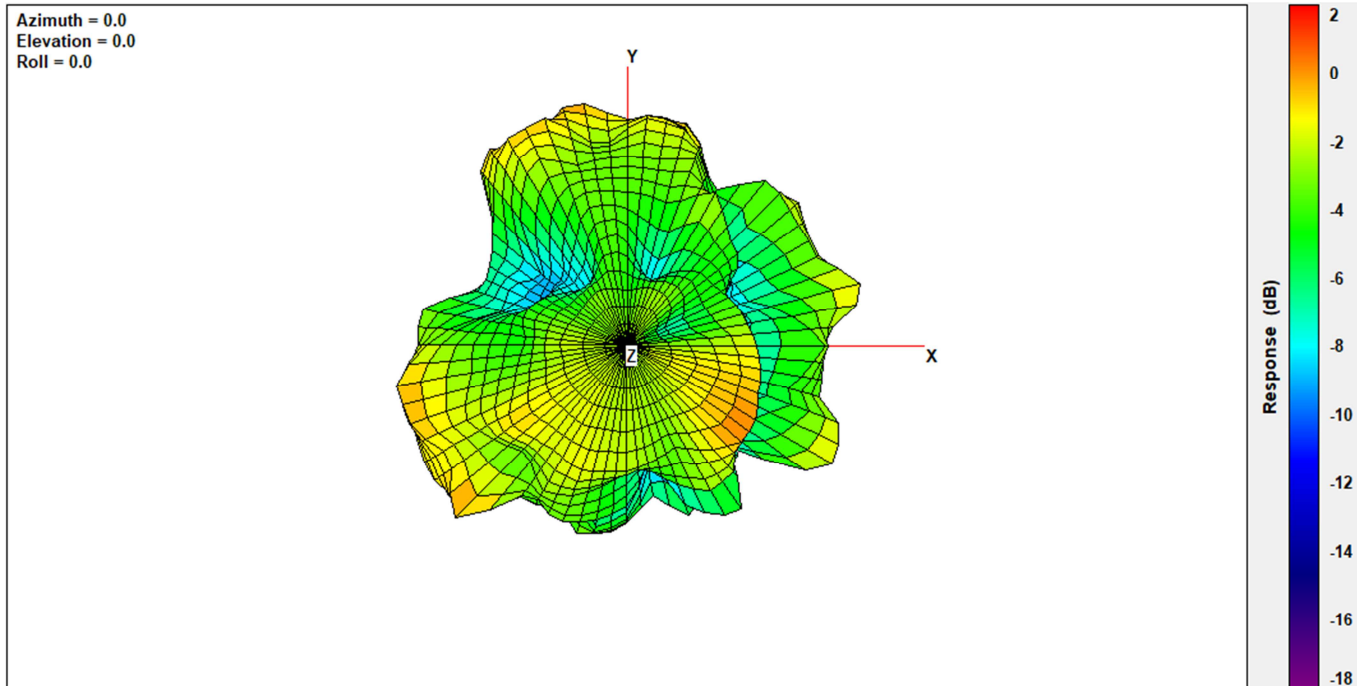
5350MHz



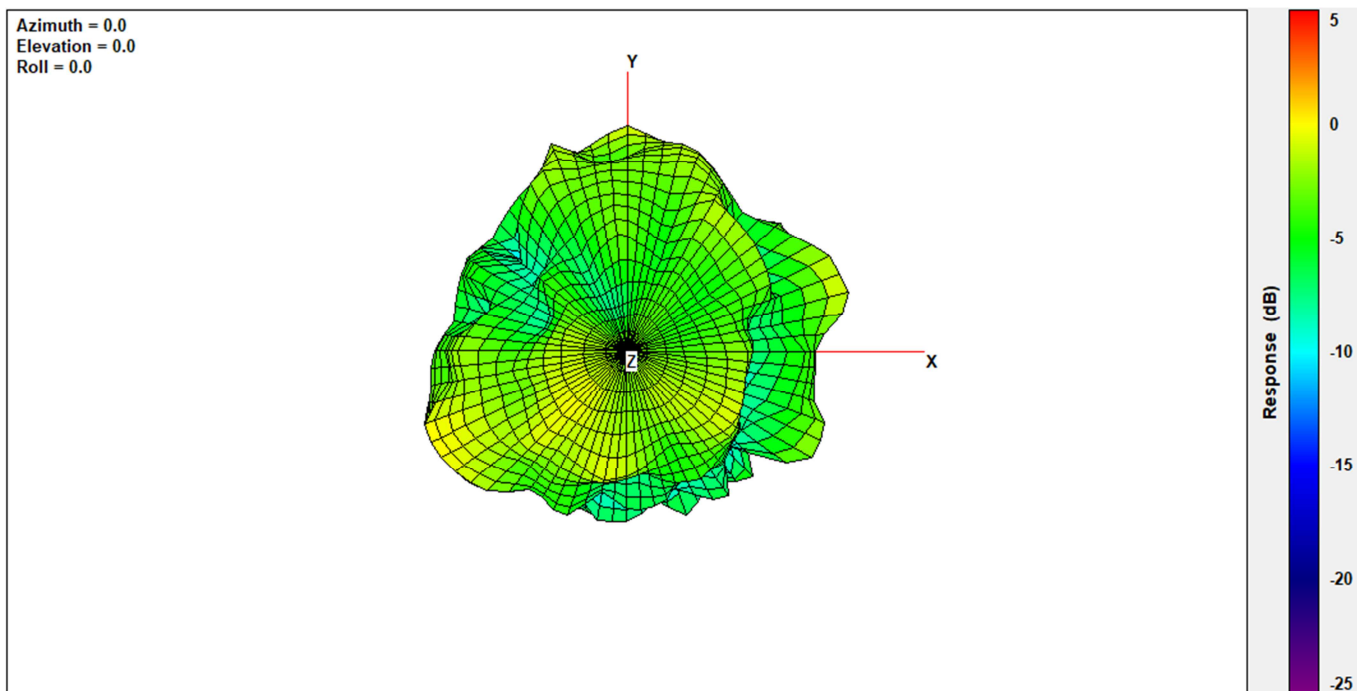
5600MHz



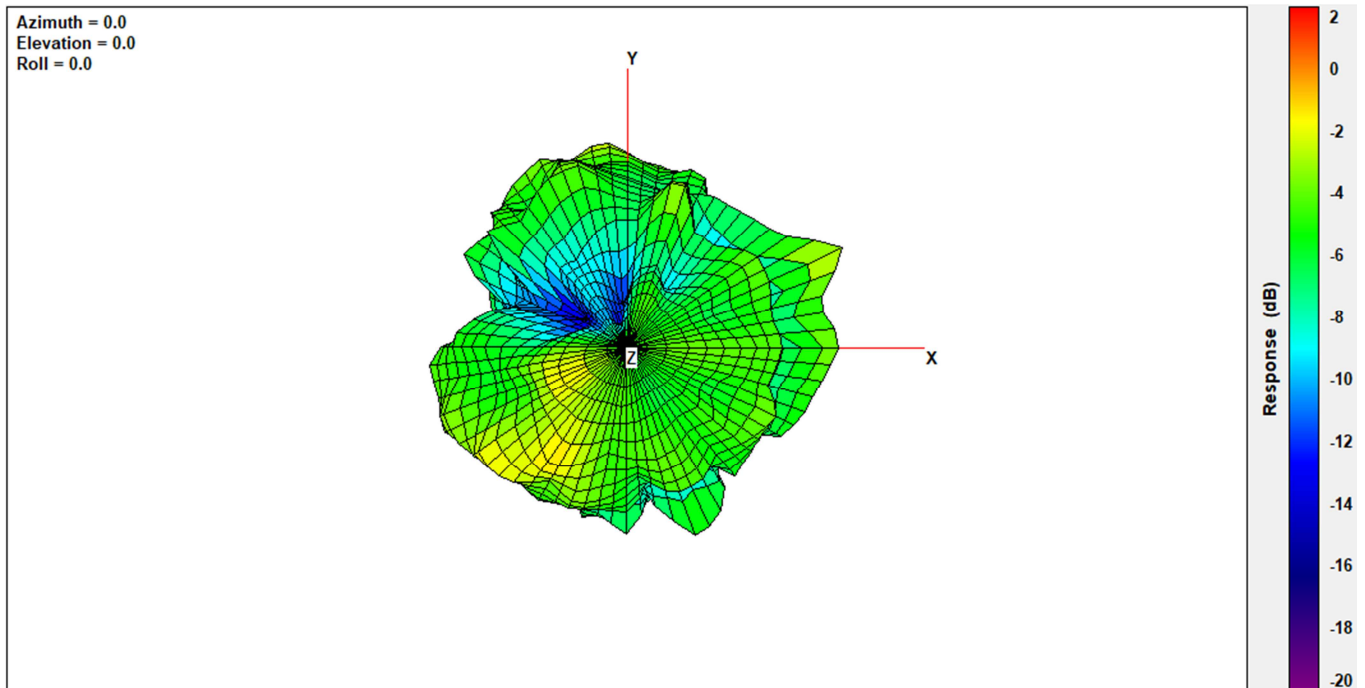
5850MHz



6125MHz



6525MHz



7125MHz

