

# SolarX 120 Antenna Report

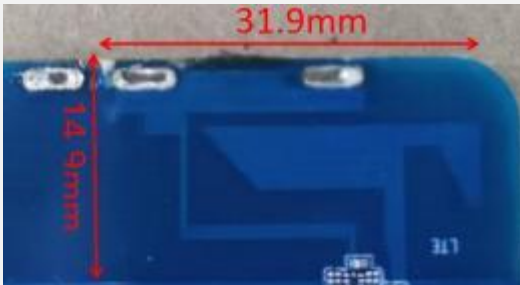
# LTE Antenna Information

Antenna Name	LTE Antenna-part 1
Antenna Model	SX120_MAIN_ANT_V1.0
Antenna Type	PCB Antenna Board
Antenna Size	33x16.6x0.8mm
Antenna Manufacturer	Shenzhen TOPFLYTech Co.,Limited
Manufacturer Address	4th-5th floor,Scientific Research Building,Tsinghua Info Hub,Nanshan Hi-Tech Park,Shenzhen,Guangdong,China
Band & Frequency	GSM 850/GSM1900 LTE B2/B4/B5/B7/B12/B13/B17/B25/B26/B38/B40/B41/B66
Antenna Photo	

# LTE Antenna Information

Antenna Name	LTE Antenna-part 2
Antenna Model	SX120_ANT_GND_V1.0
Antenna Type	Metal Frame Antenna
Antenna Size	72.6x53.8x0.2mm
Antenna Manufacturer	Shenzhen TOPFLYTech Co.,Limited
Manufacturer Address	4th-5th floor,Scientific Research Building,Tsinghua Info Hub,Nanshan Hi-Tech Park,Shenzhen,Guangdong,China
Band & Frequency	GSM 850/GSM1900 LTE B2/B4/B5/B7/B12/B13/B17/B25/B26/B38/B40/B41/B66
Antenna Photo	


# LTE Antenna Information

Antenna Name	LTE Antenna-part 3
Antenna Model	/
Antenna Type	PCB Printed Antenna
Antenna Size	31.9x14.9mm
Antenna Manufacturer	Shenzhen TOPFLYTech Co.,Limited
Manufacturer Address	4th-5th floor,Scientific Research Building,Tsinghua Info Hub,Nanshan Hi-Tech Park,Shenzhen,Guangdong,China
Band & Frequency	GSM 850/GSM1900 LTE B2/B4/B5/B7/B12/B13/B17/B25/B26/B38/B40/B41/B66
Antenna Photo	 A photograph of a blue PCB printed antenna. Red dimension lines indicate a width of 31.9mm and a height of 14.9mm. The antenna has a complex shape with several circular pads and a central rectangular area. The number '311' is visible on the bottom right of the PCB.

# BT Antenna Information

Antenna Name	BT Antenna
Antenna Model	/
Antenna Type	PCB Printed Antenna
Antenna Size	13.5x4.8mm
Antenna Manufacturer	Shenzhen TOPFLYTech Co.,Limited
Manufacturer Address	4th-5th floor,Scientific Research Building,Tsinghua Info Hub,Nanshan Hi-Tech Park,Shenzhen,Guangdong,China
Band & Frequency	2402~2480MHz
Antenna Photo	

# GPS Antenna Information

Antenna Name	GPS Antenna
Antenna Model	/
Antenna Type	PCB Printed Antenna
Antenna Size	22x4.7mm
Antenna Manufacturer	Shenzhen TOPFLYTech Co.,Limited
Manufacturer Address	4th-5th floor,Scientific Research Building,Tsinghua Info Hub,Nanshan Hi-Tech Park,Shenzhen,Guangdong,China
Band & Frequency	1559~1610MHz
Antenna Photo	

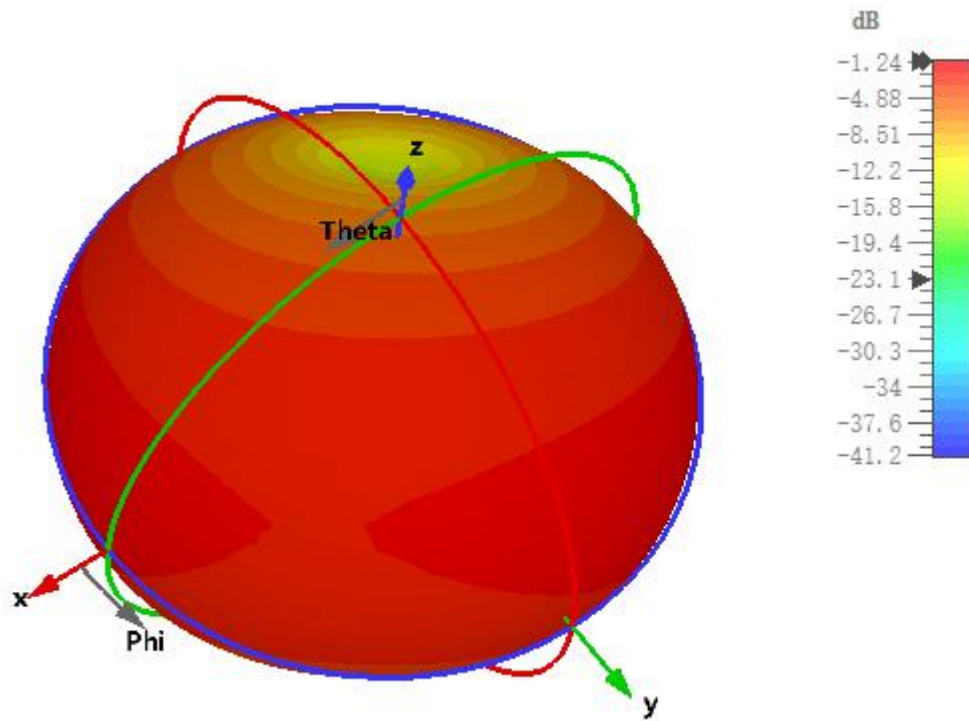
# GPS Antenna Performance — Efficiency and Gain

Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)
1550	33.9%	-4.69	2.23
1554	38.6%	-4.13	2.83
1558	42.9%	-3.67	3.27
1562	47.3%	-3.25	3.55
1566	52.6%	-2.79	3.84
1570	54.8%	-2.61	3.85
1574	57.0%	-2.44	3.59
1578	57.6%	-2.39	3.68
1582	55.2%	-2.57	3.40
1586	54.3%	-2.65	3.64
1590	53.7%	-2.69	3.77
1594	55.2%	-2.57	3.80
1598	56.2%	-2.50	4.18
1602	55.7%	-2.54	4.23
1606	56.4%	-2.48	4.40
1610	55.5%	-2.56	4.38

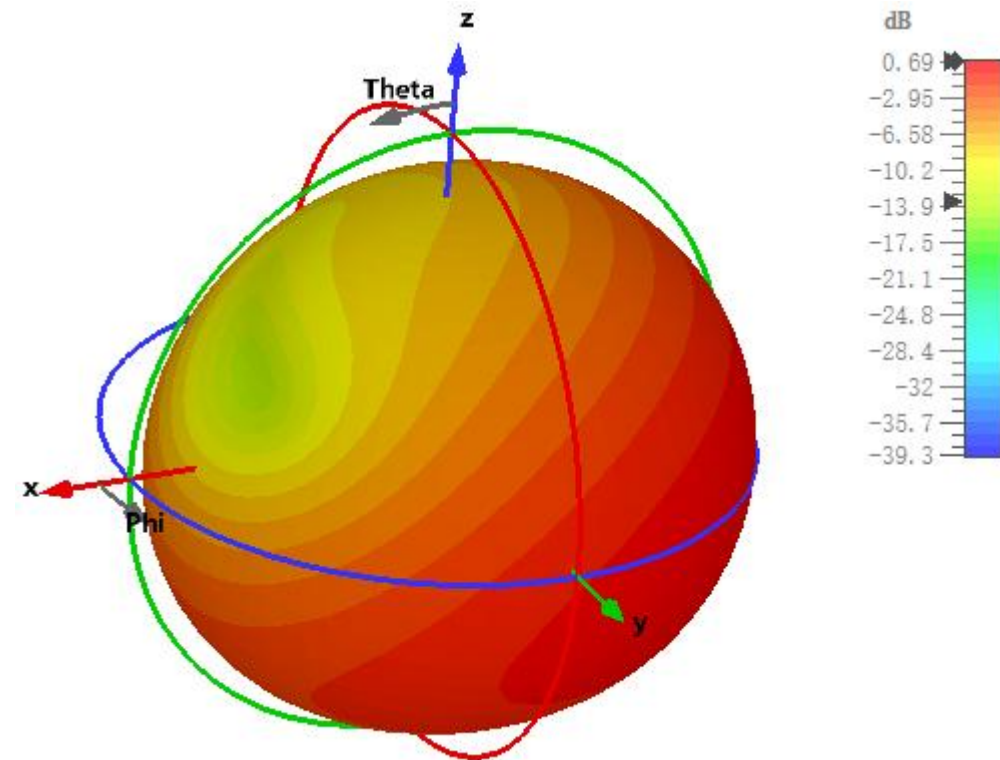
Mode	Frequency(MHz)	Peak Gain (dBi)	Antenna Type
BT-LE	2402 ~ 2480	1.20	PCB Antenna
GSM850	824 ~ 849	-1.24	PCB Antenna
GSM1900	1850 ~ 1910	0.69	PCB Antenna
LTE B2	1850 ~ 1910	0.69	PCB Antenna
LTE B4	1710 ~ 1755	0.46	PCB Antenna
LTE B5	824 ~ 849	-1.24	PCB Antenna
LTE B7	2500 ~ 2570	0.59	PCB Antenna
LTE B12	699 ~ 716	-2.67	PCB Antenna
LTE B13	777 ~ 787	-2.07	PCB Antenna
LTE B17	704 ~ 716	-2.84	PCB Antenna
LTE B25	1850 ~ 1915	0.69	PCB Antenna
LTE B26	814~ 849	-1.24	PCB Antenna
LTE B38	2570 ~ 2620	-0.46	PCB Antenna
LTE B40	2305 ~ 2315	-0.06	PCB Antenna
	2350 ~ 2360	-0.25	PCB Antenna
LTE B41	2496 ~ 2690	0.59	PCB Antenna
LTE B66	1710 ~ 1780	0.46	PCB Antenna



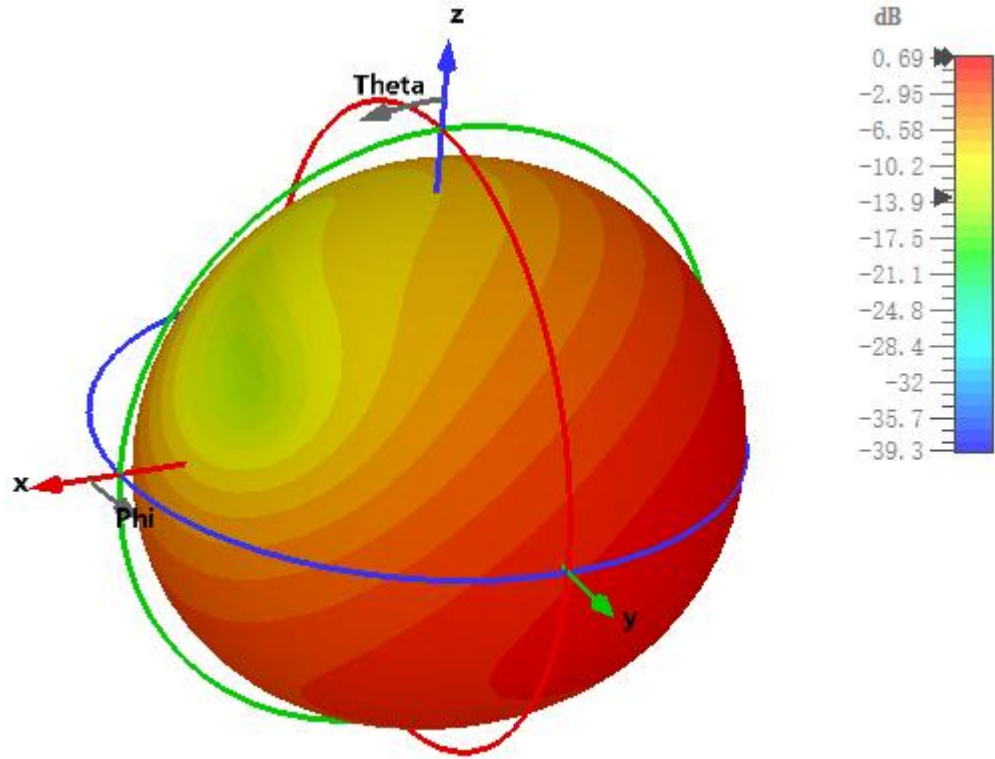
GSM850@-1.24dBi



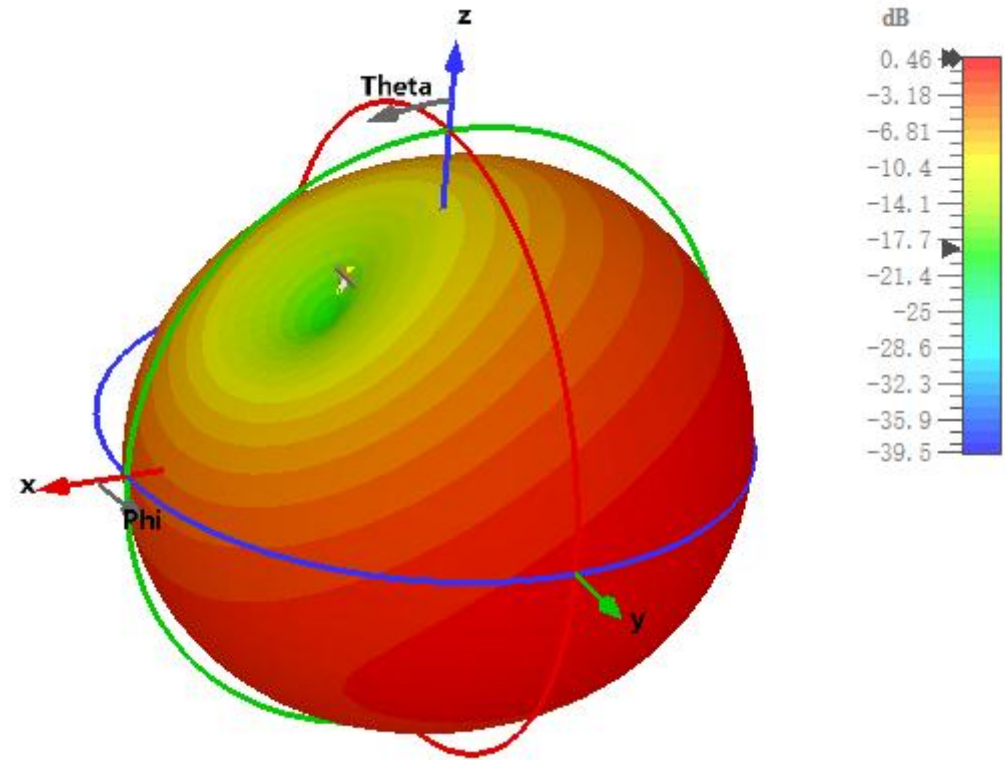
GSM1900@0.69dBi



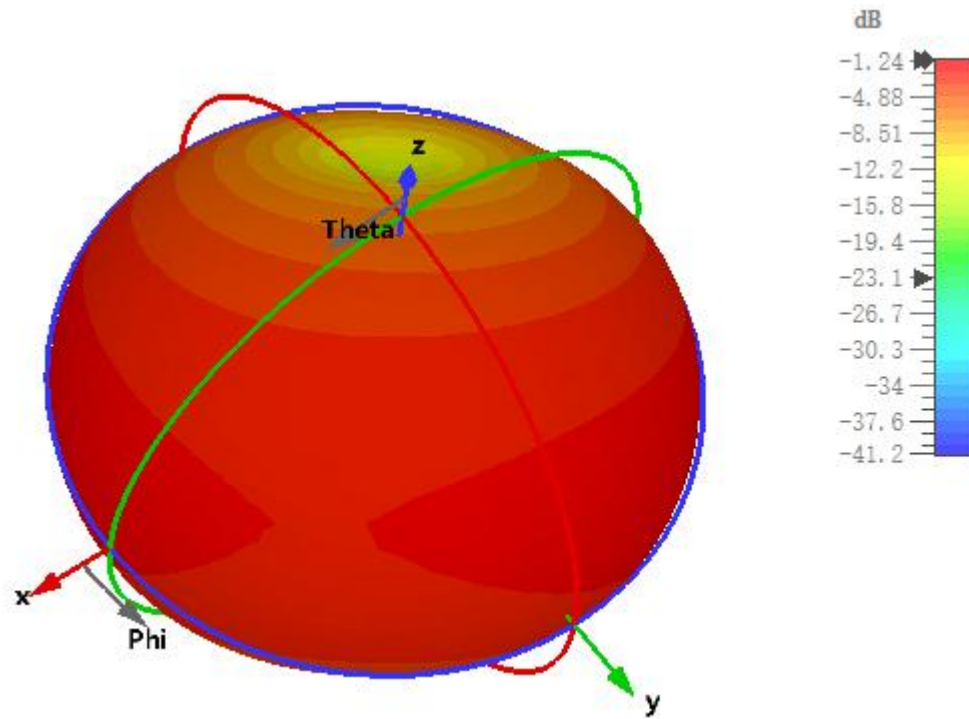
Band 2@0.69dBi



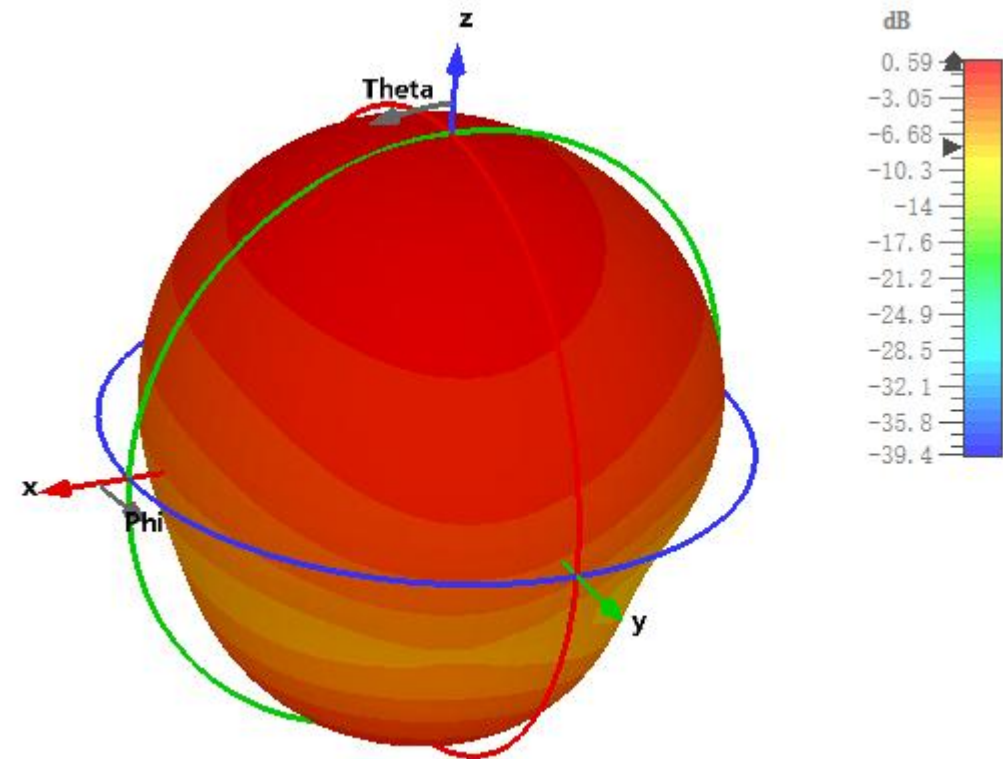
Band 4@0.46dBi



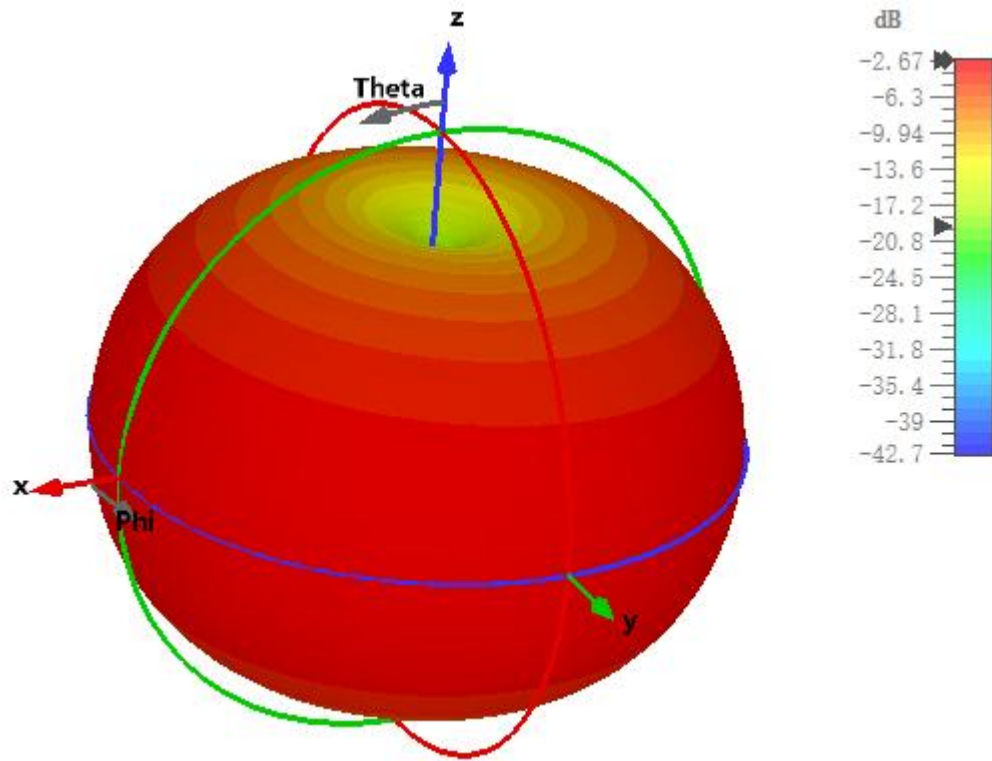
Band 5@-1.24dBi



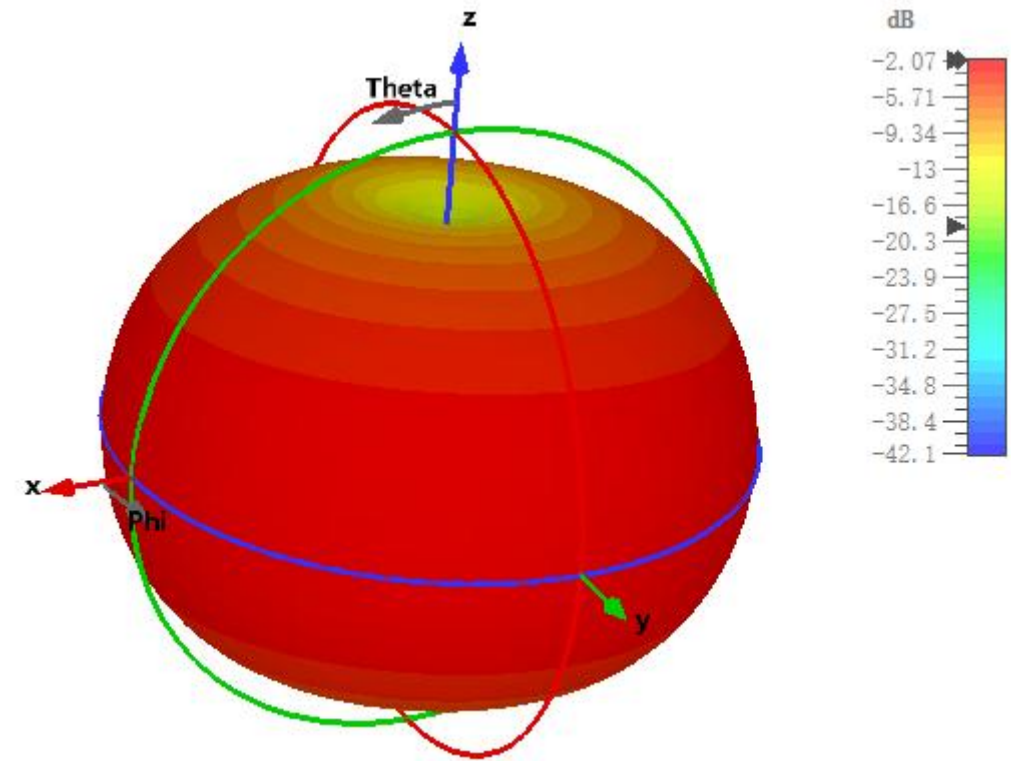
Band 7@0.59dBi



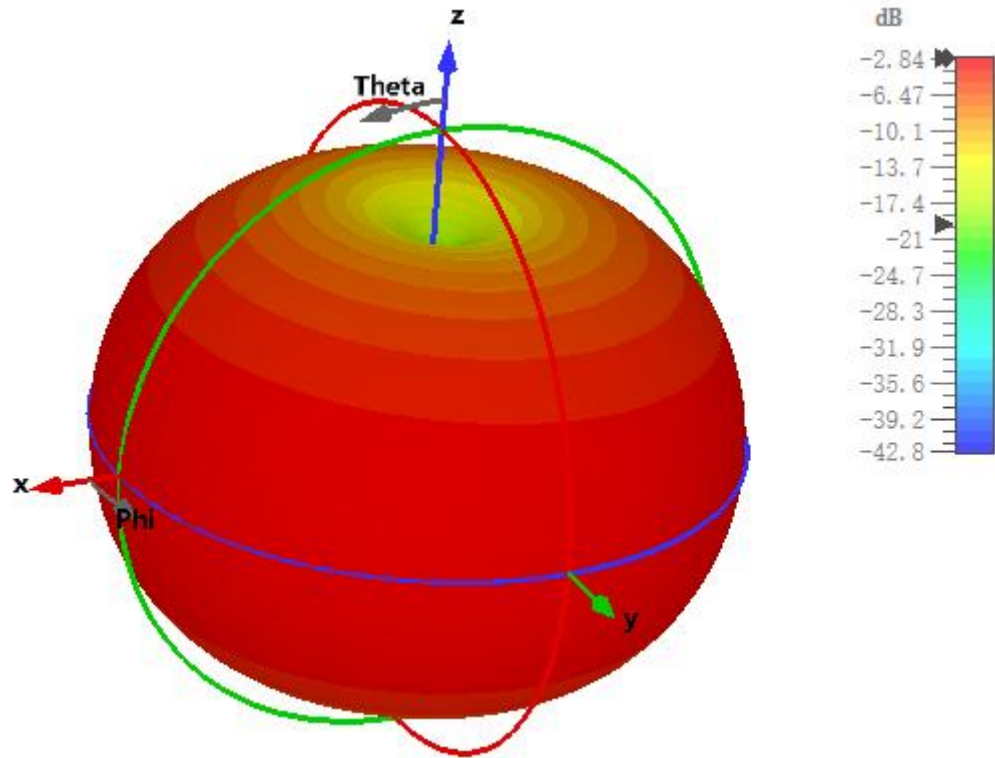
Band 12@-2.67dBi



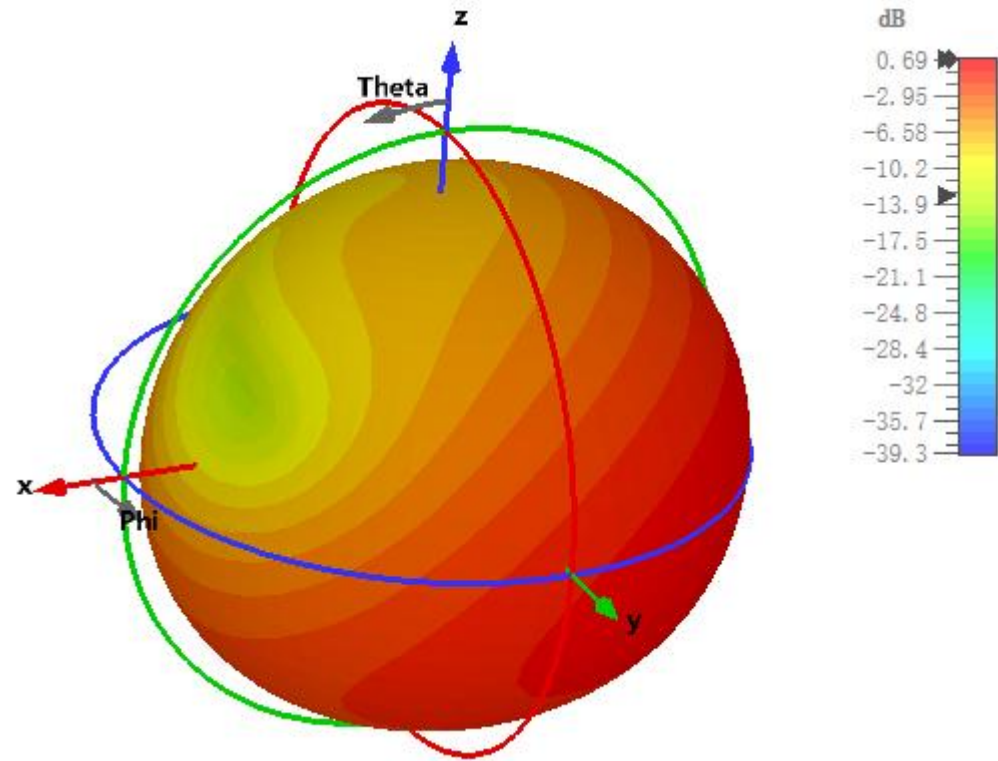
Band 13@-2.07dBi



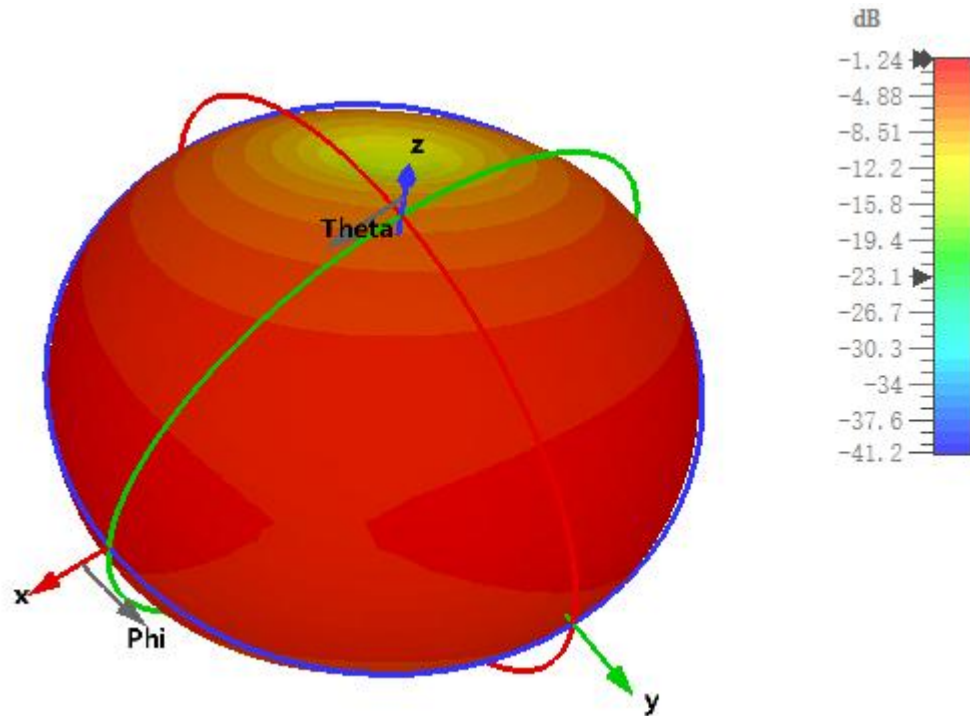
Band 17@-2.84dBi



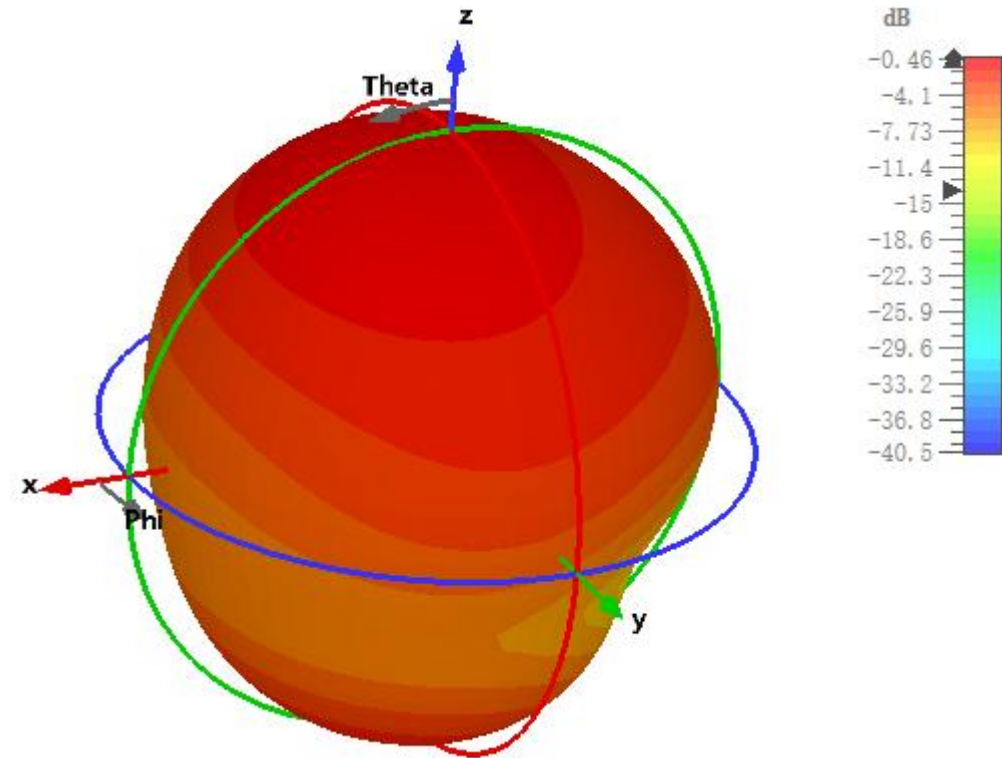
Band 25@0.69dBi



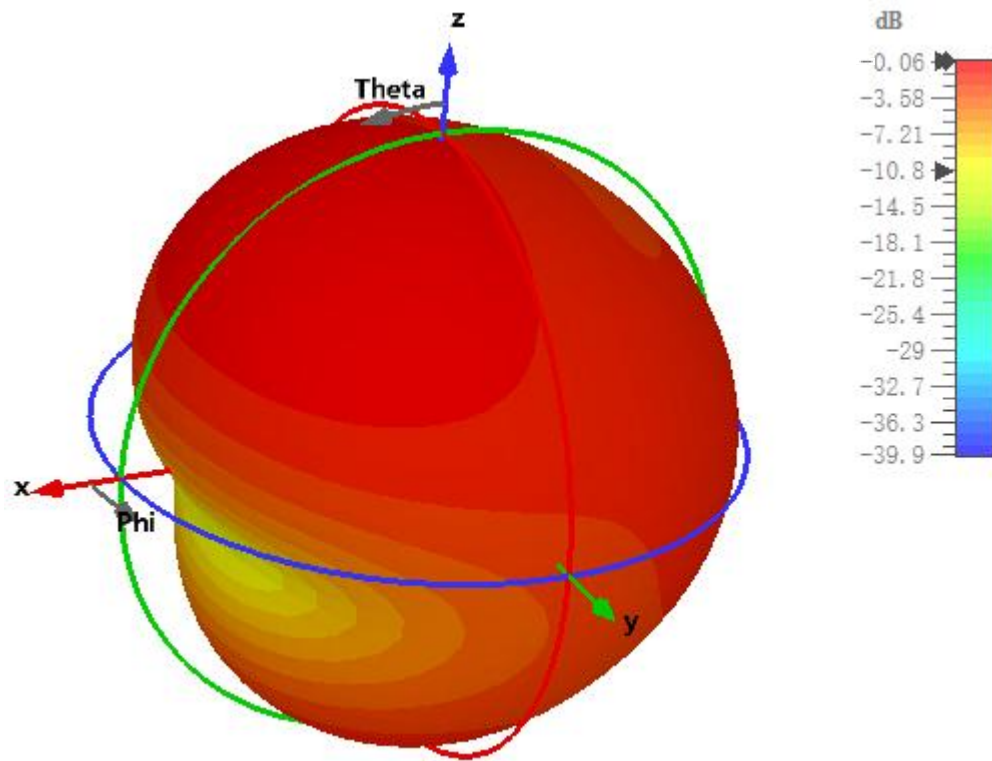
Band 26@-1.24dBi



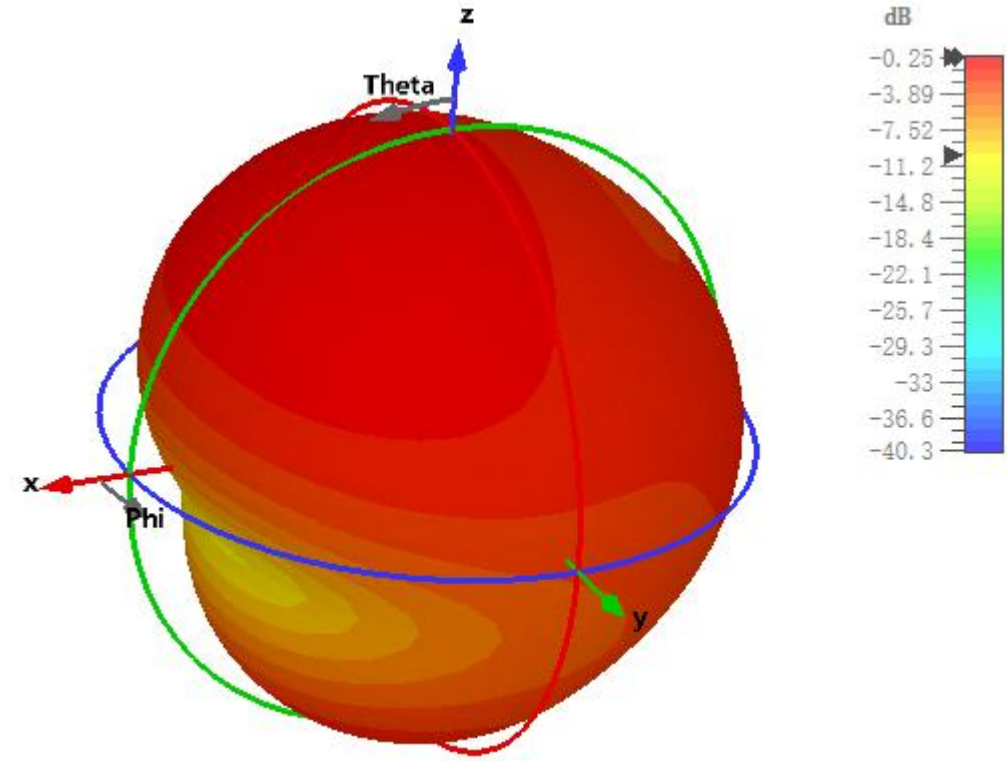
Band 38@-0.46dBi



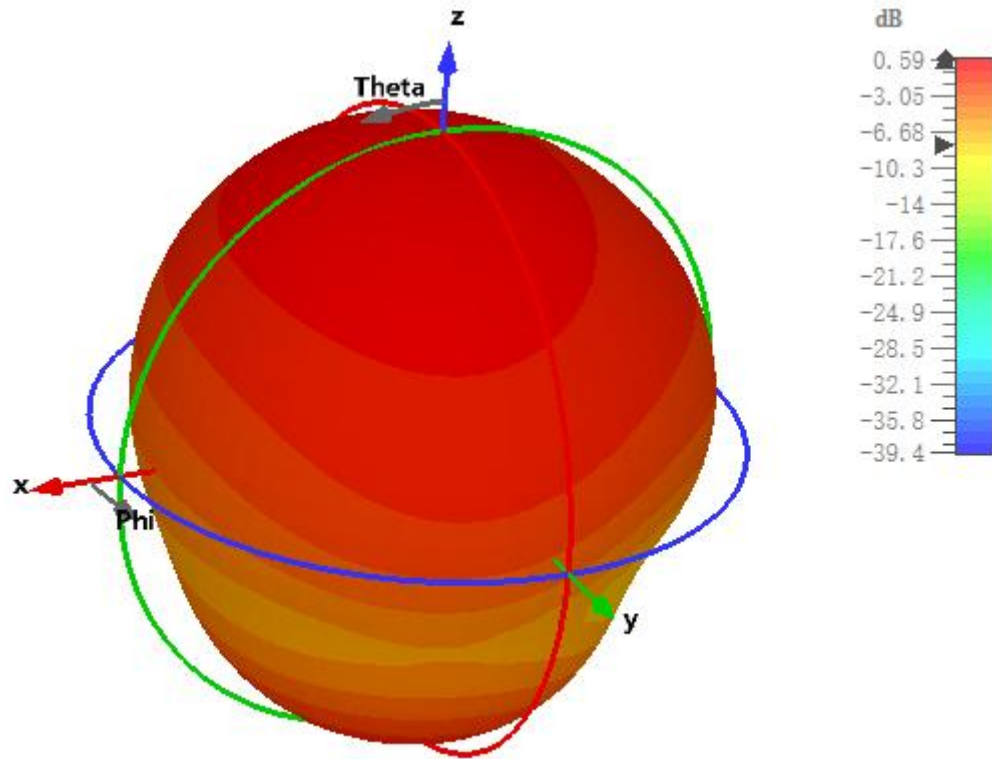
Band 40@-0.06dBi



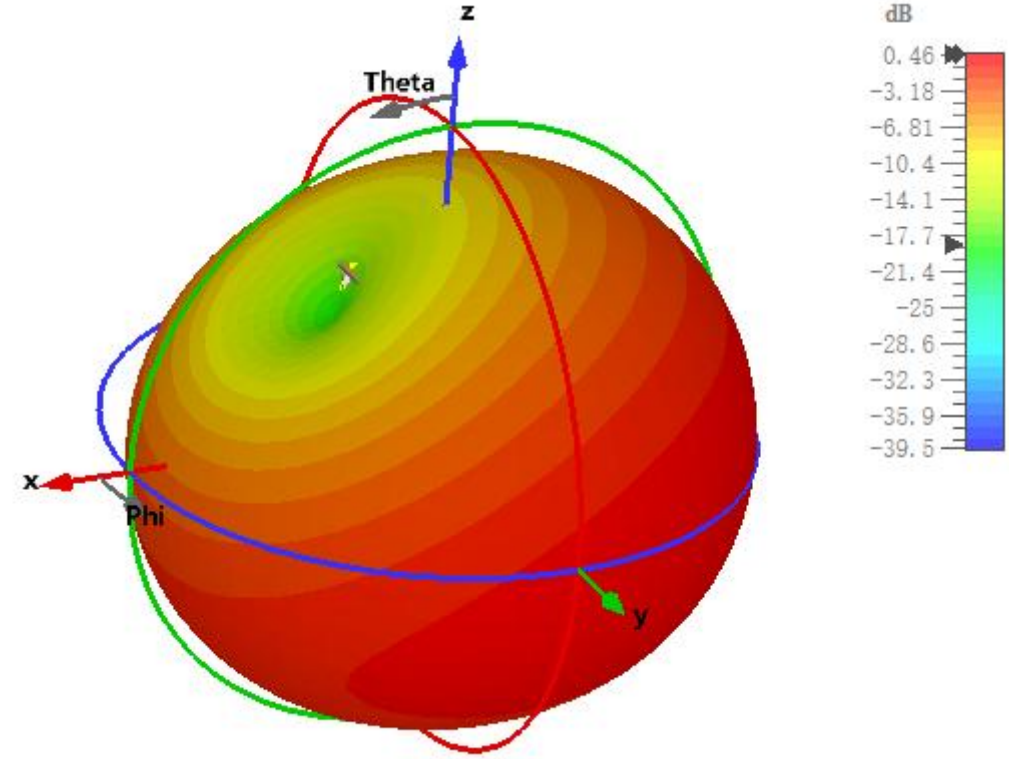
Band 40@-0.25dBi



Band 41@0.59dBi



Band 66@0.46dBi





BT-LE@ 1.20dBi

