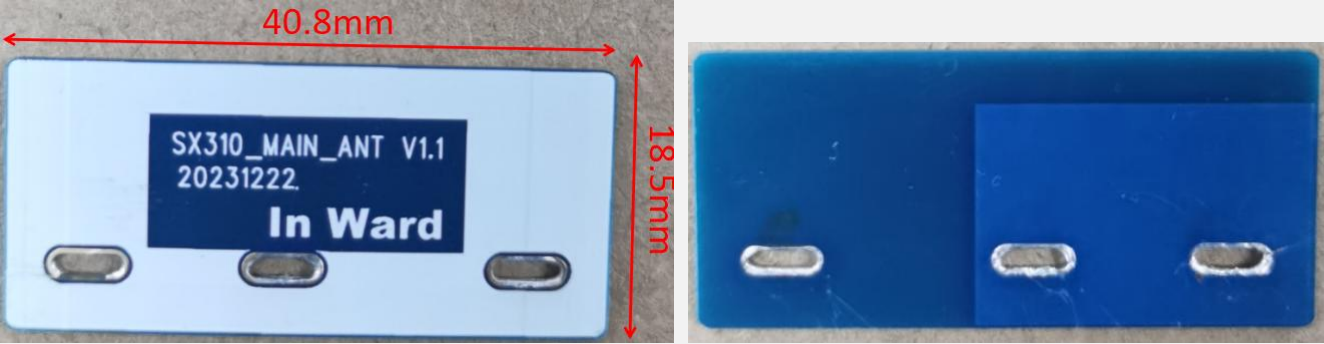


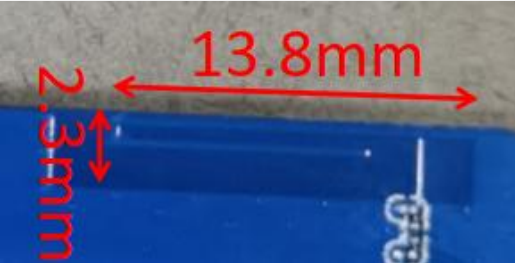
SolarX 310 Antenna Report

Antenna Name	LTE Antenna-part 1
Antenna Model	SX310_MAIN_ANT_V1.1
Antenna Type	PCB Antenna Board
Antenna Size	40.8x18.5x0.8mm
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/B12/B13/B25/B26/B66/B71/B85
Antenna Photo	

LTE Antenna Information

Antenna Name	LTE Antenna-part 2
Antenna Model	SX310_ANT_GND_V1.1
Antenna Type	PCB Antenna Board
Antenna Size	23x22.1x0.8mm
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/B12/B13/B25/B26/B66/B85
Antenna Photo	

Antenna Name	LTE Antenna-part 3
Antenna Model	/
Antenna Type	PCB Printed Antenna
Antenna Size	32.8x12mm
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/B12/B13/B25/B26/B66/B85
Antenna Photo	

Antenna Name	BT Antenna
Antenna Model	/
Antenna Type	PCB Printed Antenna
Antenna Size	13.8x2.3mm
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

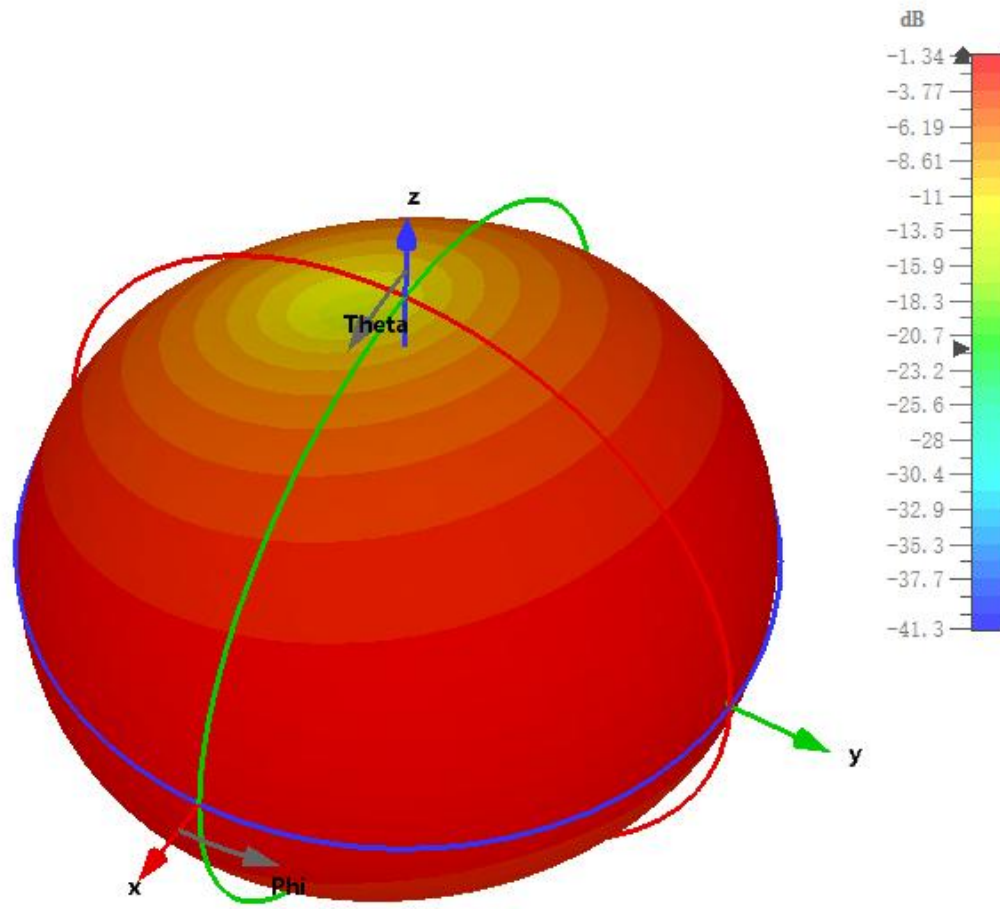
Antenna Name	GPS Antenna
Antenna Model	/
Antenna Type	PCB Printed Antenna
Antenna Size	20x5.3mm
Antenna Manufacturer	Shenzhen TOPFLYTech Co.,Limited
Manufacturer Address	4th-5th floor,Scientific Research Building,Tsinghua Info Hub,Nanshan Hi-Tech Park,Shenzhen,Guangdong,China
Band & Frequency	1559~1610MHz
Antenna Photo	

Frequency (MHz)	Efficiency (%)	Efficiency (dB)	Gain (dBi)
1559	42.67%	-3.70	3.28
1562	44.71%	-3.50	3.46
1566	47.04%	-3.28	3.60
1570	49.29%	-3.07	3.73
1574	57.04%	-2.44	4.03
1578	58.26%	-2.35	3.90
1582	59.39%	-2.26	3.77
1586	60.02%	-2.22	3.83
1590	57.53%	-2.40	3.99
1594	57.89%	-2.37	4.21
1598	58.51%	-2.33	4.37
1602	58.39%	-2.34	4.39
1606	58.02%	-2.36	4.41
1610	58.42%	-2.41	4.49

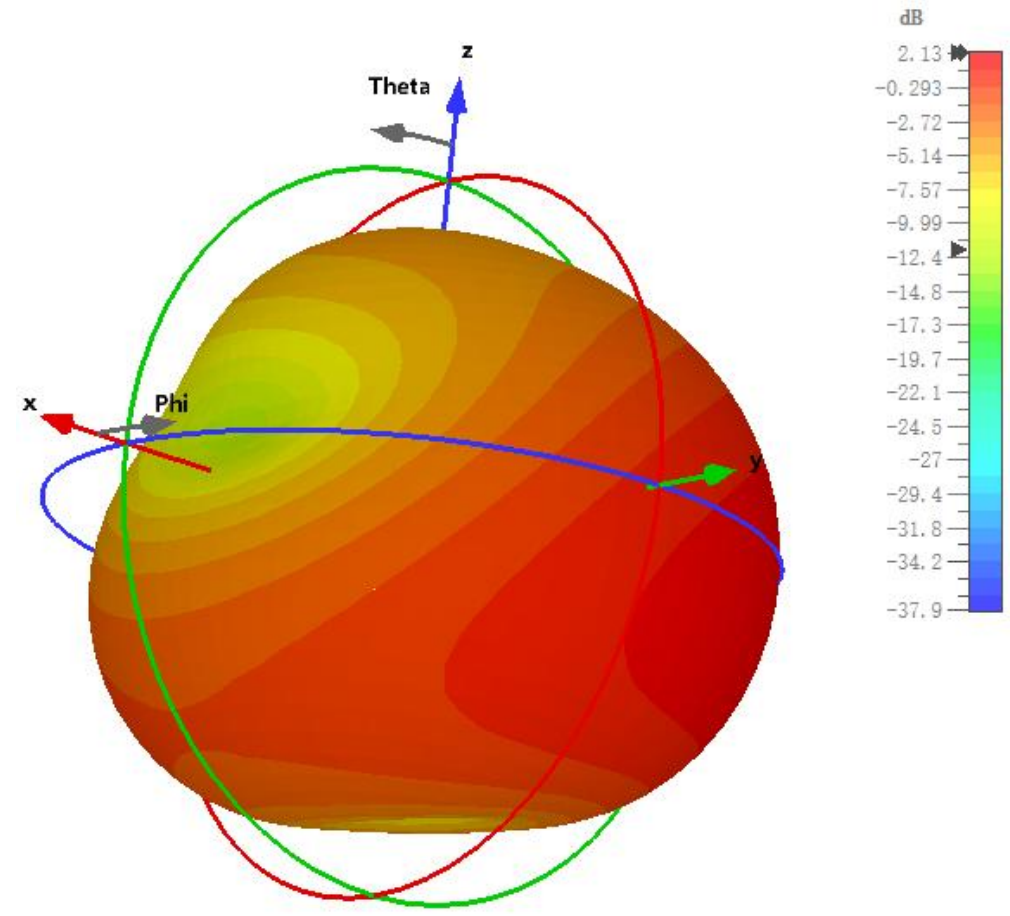
LTE&BT Antenna Performance —— Band with Peak Gain

Transmitter Circuit	Frequency(MHz)	Peak Gain (dBi)	Antenna Type
GSM850	824 ~ 849	-1.34	PCB Antenna
GSM1900	1850 ~ 1910	2.13	PCB Antenna
Band 2	1850 ~ 1910	2.13	PCB Antenna
Band 4	1710 ~ 1755	1.56	PCB Antenna
Band 5	824~849	-1.34	PCB Antenna
Band 12	699~ 716	0.65	PCB Antenna
Band 13	777~ 787	0.86	PCB Antenna
Band 25	1850~ 1915	2.13	PCB Antenna
Band 26	814~ 849	0.31	PCB Antenna
Band 66	1710 ~ 1780	1.61	PCB Antenna
Band 71	663 ~ 698	0.65	PCB Antenna
Band 85	698 ~ 716	0.65	PCB Antenna
BT-LE	2402 ~ 2480	1.20	PCB Antenna

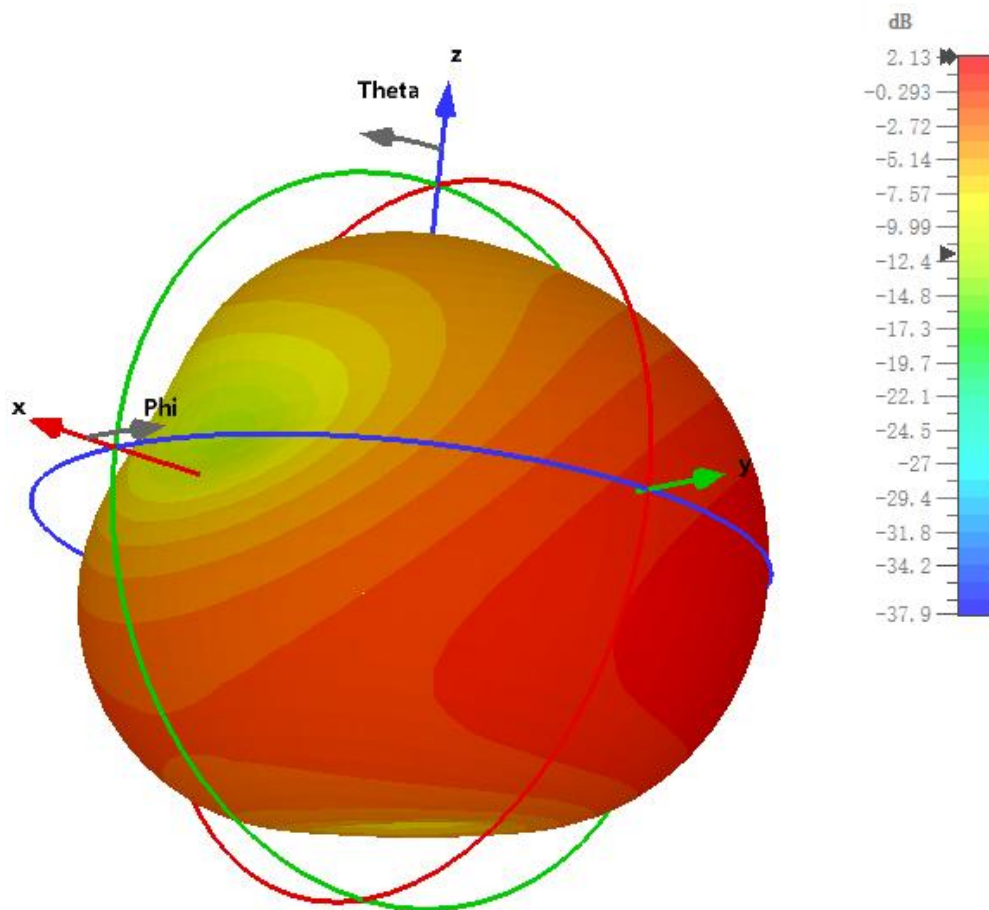
GSM850@-1.34dBi



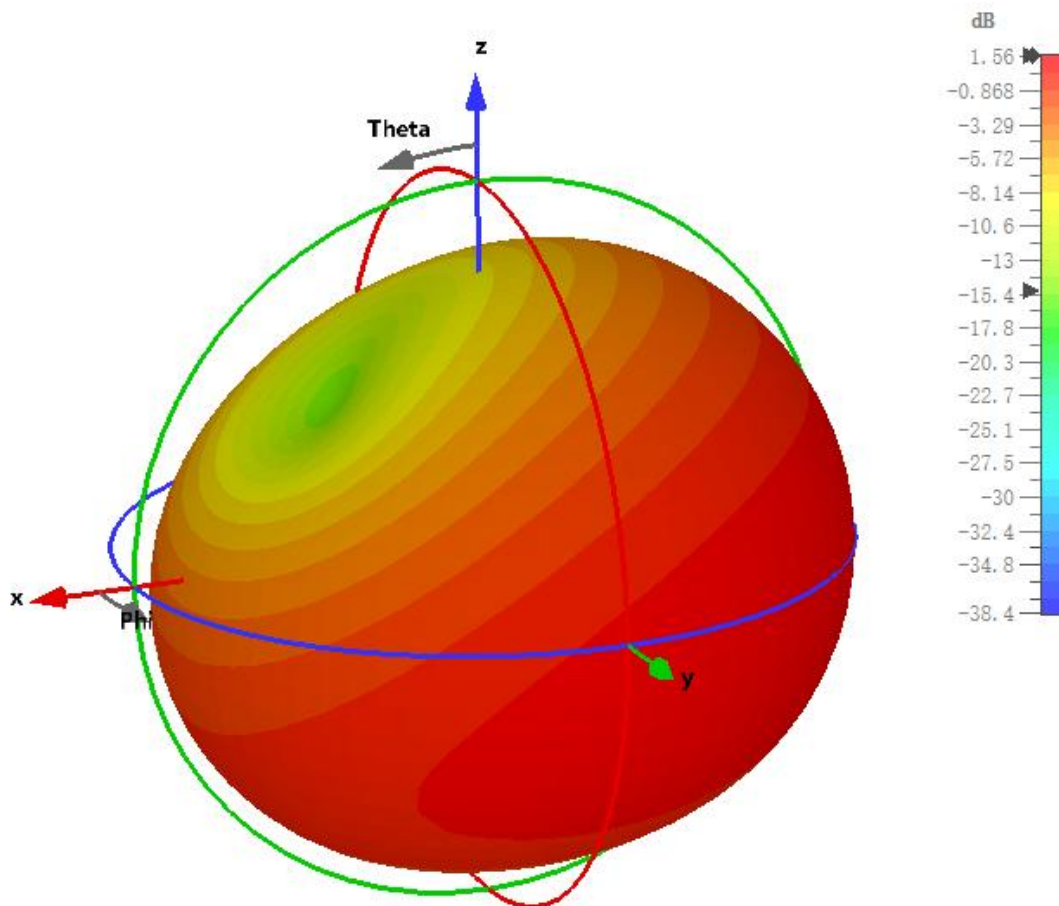
GSM1900@2.13dBi



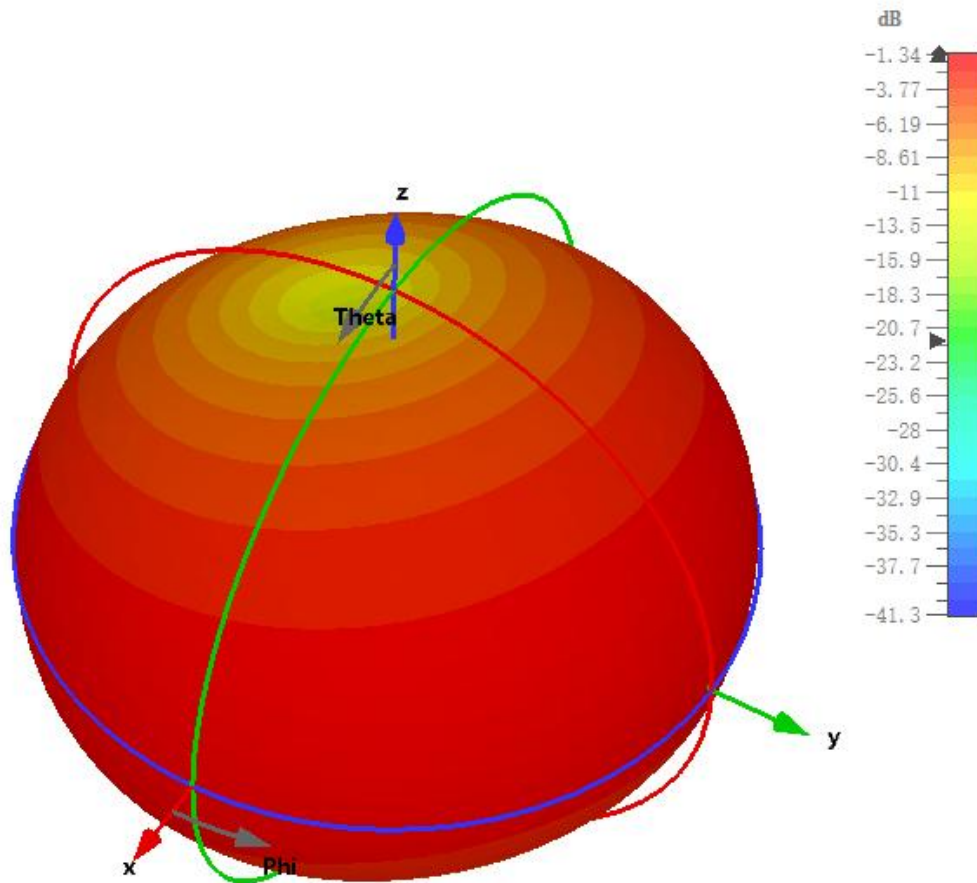
Band 2@2.13dBi



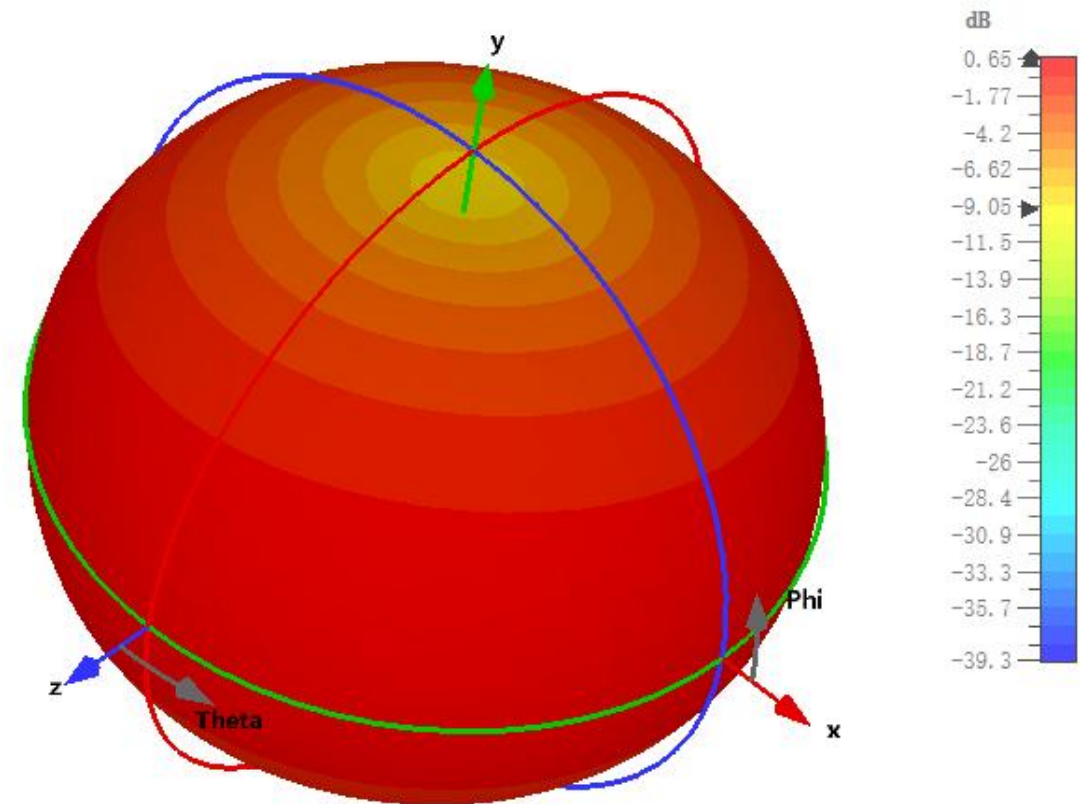
Band 4@1.56dBi



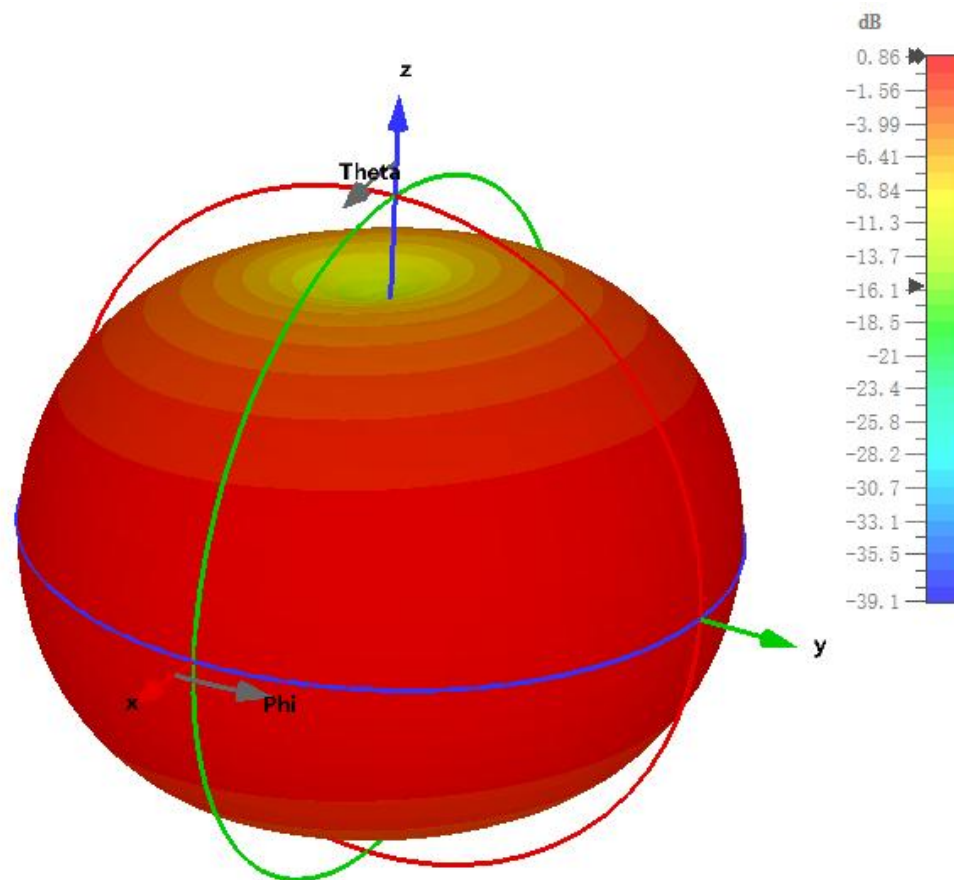
Band 5@-1.34dBi



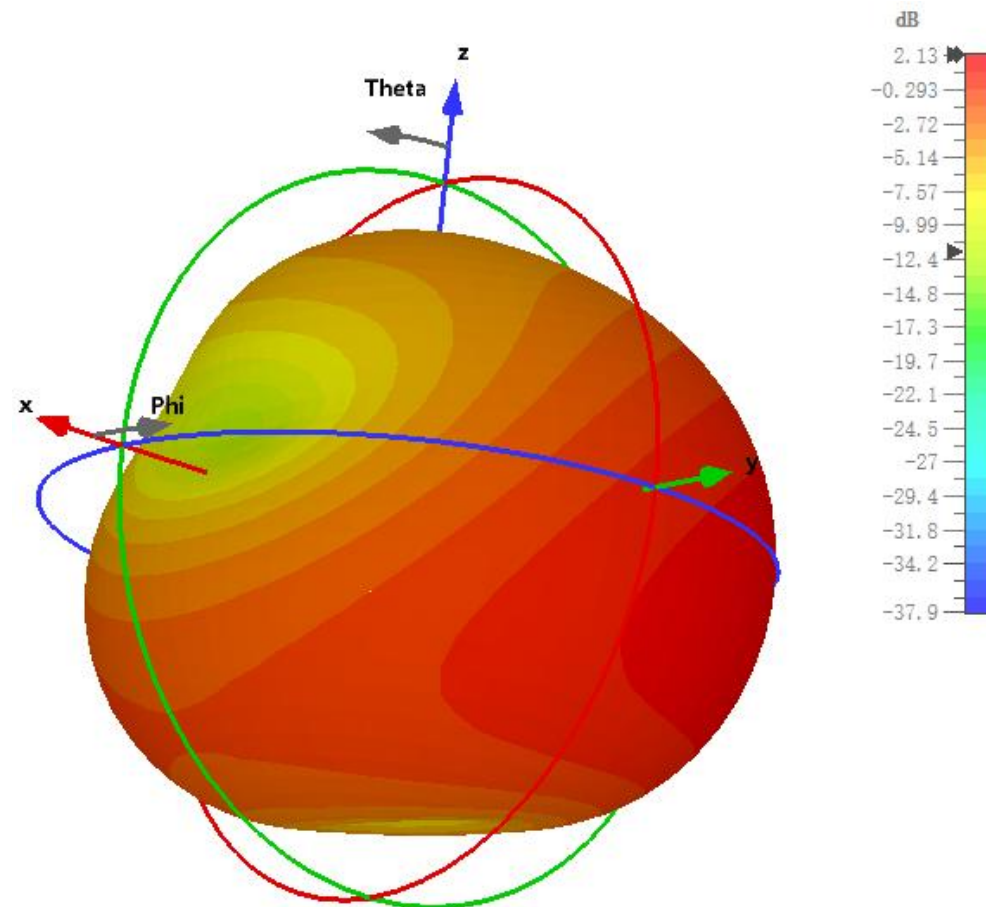
Band 12@0.65dBi



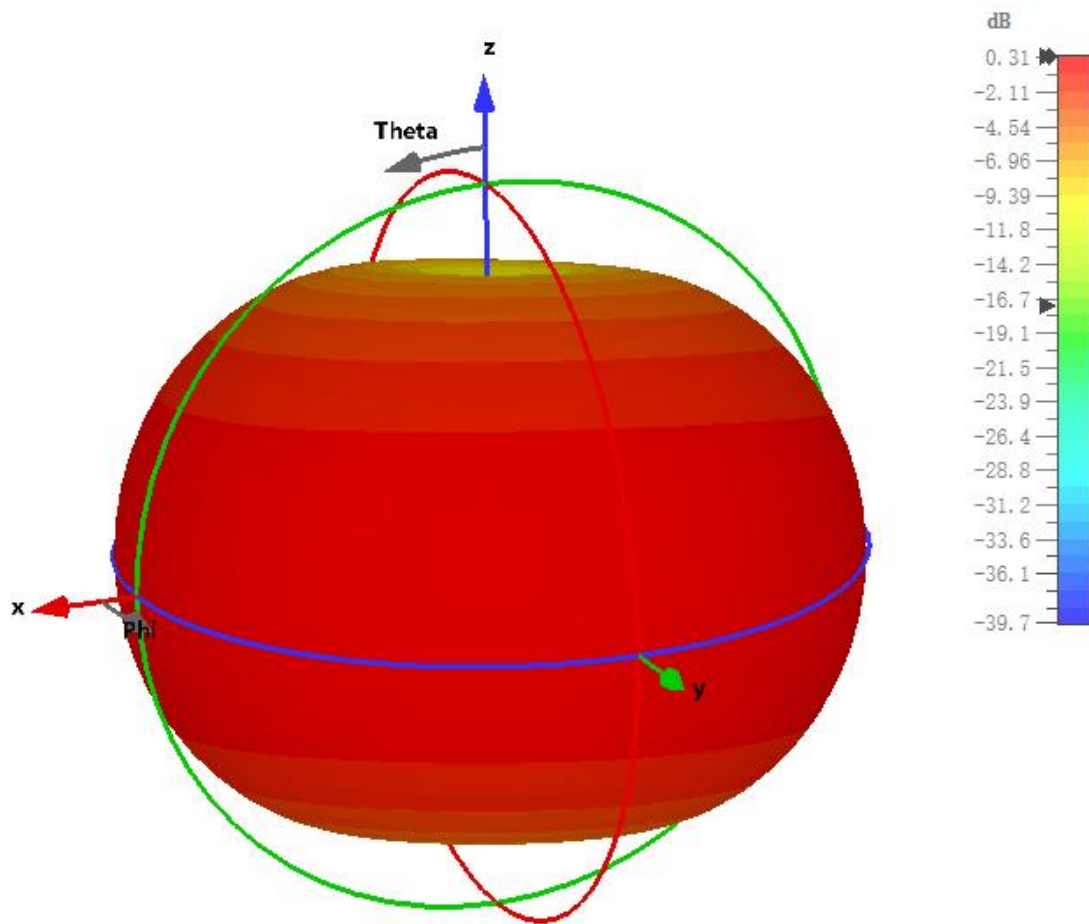
Band 13@0.86dBi



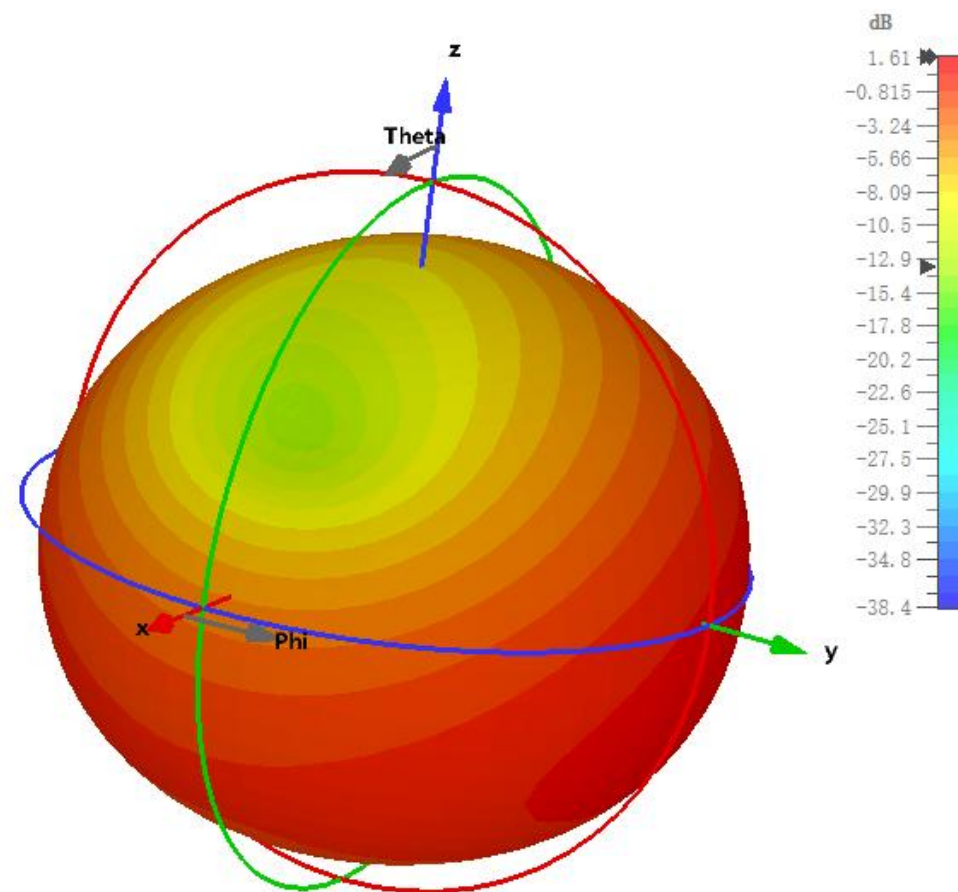
Band 25@2.13dBi



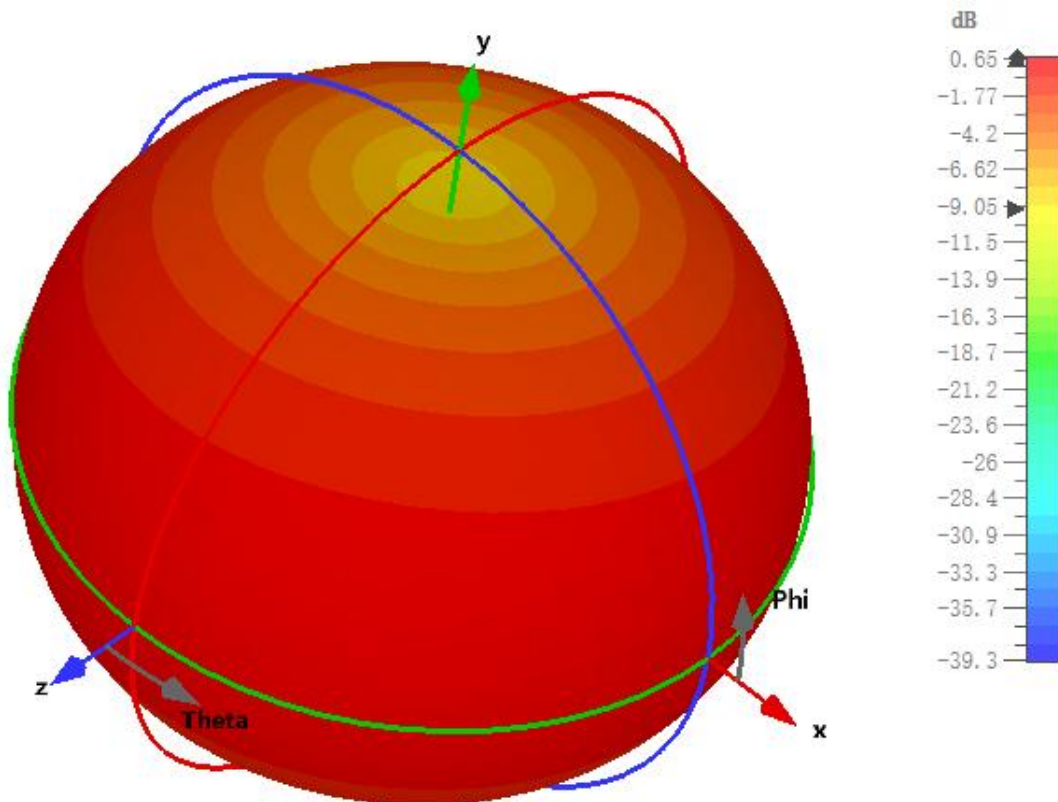
Band 26@0.31dBi



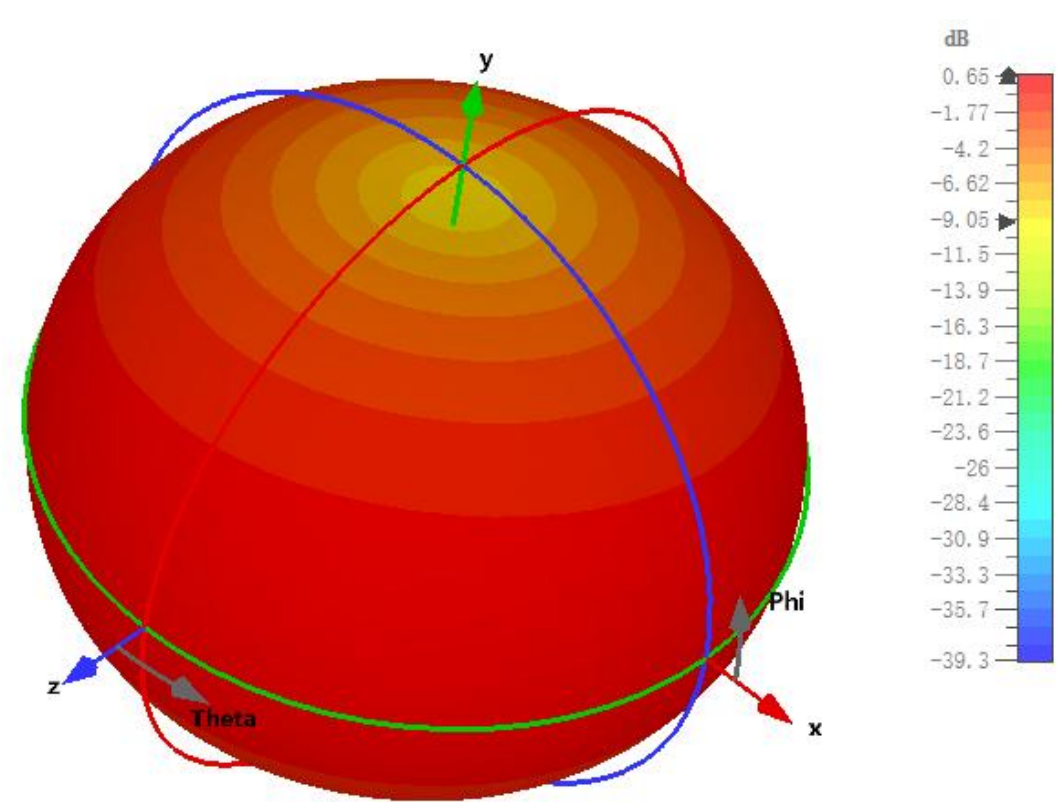
Band 66@1.61dBi



Band 71@0.65dBi



Band 85@0.65dBi



BT-LE@1.20dBi

