

Regulatory WWAN Antenna Information

Platform	
Platform Owner	DELL
Brand Name	DELL
Model Name	P175G
ODM	Compal
	TB mode
Antenna	
Manufacturer	speed
Part Number	<ul style="list-style-type: none"> ■ Tx1/Rx1 Antenna WWAN Main/AUX: F-0G-FH-6165-002-00(DC33002RF1L) ■ MIMO2/3 Antenna WWAN: F-0G-FH-6155-004-00(DC33002R91L)
Module	
With WWAN Module	FM350-GL
(Check Box)	L860-GL-16

Antenna Sample / Antenna Data Requirements for worldwide regulatory approval

Section	Description of Required OEM / ODM Antenna Information	US / IC	EU	Japan	Taiwan	S.Korea
1A	Part Number for Antenna only	Required	Required	Required	Required	Required
1B	Antenna Manufacturer Name	Required	Required	Required	Required	Required
1C	Description of Antenna Type	Required	N/A	N/A	N/A	N/A
1D	Part number of Antenna Assembly / cable impedance, length & diameter.	Required	Desired	Desired	Desired	Desired
1E	Tx1, Tx2 & Tx3 antenna (Peak Gain W/ cable loss) *	Required	Required	Required	Required	Required
	1E OR 1F, 1G, 1H					
1F	Tx1, Tx2 & Tx3 antenna (Peak Gain only) *	Required	Required	Required	Required	Required
1G	VSWR of cable including connector	Required	Required	Required	Required	Required
1H	Tx1, Tx2 & Tx3 antenna (Cable loss W/ connector) *	Required	Required	Required	Required	Required
2	Dimensioned Photographs <u>and</u> Drawings of Tx1, Tx2, and Tx3 (or Rx3) antennas	Required	Required	Required	Required	Required
3	Radiation patterns of antennas loaded in the host platform.	Required	Desired	Required	N/A	Required
4	Platform model name / number - correlated to antenna manufacturer and antenna part number	Required	Required	Desired	Required	Desired
5	Photograph(s) or Drawings showing location of antennas in platform. <u>(S. Korea requires photographs of antennas for approval submission). Taiwan requires pictures of each antenna type shown in the system.</u>	Required	Required	Desired	<u>Required (Photos)</u>	<u>Required (Photos)</u>
6	Mech. drawings / photos with dimensions of antenna locations and distance from end-user (For evaluation of SAR testing requirement).	Required	N/A	N/A	N/A	N/A
7	Photograph(s) or Drawings showing the location of all antennas (WLAN, other) and distance between those transmitting antennas. Information will be used to evaluate whether co-location testing is required.	Required	N/A	N/A	N/A	N/A
8	Local representative contact information for LMA/ PARS process.	Required	N/A	N/A	N/A	N/A

Antenna Information

Section 1. Antenna Assembly Specifications

1A	1B	1C	1D	1E	1F	1G	1H
Antenna Part Number	Manufacture	Antenna Type	Cable Assembly Part Number and Information	*Peak Gain W/ Cable loss (dBi)	Peak Gain w/o Cable Loss (dBi)	VSWR	Cable Loss (dBi)
Tx/Rx1 Antenna speed P/N: F-0G-FH-6165-002-00 Customer P/N: DC33002RF1L	speed	PIFA	Cable length: 319mm diameter: 1.13mm 50 ohm SLL Coaxial MAIN Connector: I-PEX PN:20565-001R-13	617-698MHz -12.87 dBi (peak)	617-698MHz -12.32 dBi (peak)	617-698MHz 3.50 max	617-698MHz 0.55 (peak) dBi
				698-821MHz -6.43 dBi (peak)	698-821MHz -5.88 dBi (peak)	698-821MHz 3.50 max	698-821MHz 0.55 dBi (peak)
				824-960MHz -5.91 dBi (peak)	824-960MHz -5.33 dBi (peak)	824-960MHz 3.50 max	824-960MHz 0.58 dBi (peak)
				1425-1515MHz -9.90 dBi (peak)	1425-1515MHz -9.2 dBi (peak)	1425-1515MHz 3.50 max	1425-1515MHz 0.70 dBi (peak)
				1710-2200MHz -3.60 dBi (peak)	1710-2200MHz -2.8 dBi (peak)	1710-2200MHz 3.50 max	1710-2200MHz 0.80 dBi (peak)
				2300-2690MHz -1.99 dBi (peak)	2300-2690MHz -1.1 dBi (peak)	2300-2690MHz 3.50 max	2300-2690MHz 0.89 dBi (peak)
				3400-3800MHz -5.07 dBi (peak)	3400-3800MHz -4.01 dBi (peak)	3400-3800MHz 3.50 max	3400-3800MHz 1.06 dBi (peak)
				4200-4700MHz -3.53 dBi (peak)	4200-4700MHz -2.31 dBi (peak)	4200-4700MHz 3.50 dBi (peak)	4200-4700MHz 1.22 dBi (peak)
	5150-5925MHz -2.39 dBi (peak)	5150-5925MHz -1.04 dBi (peak)	5150-5925MHz 3.50 max	5150-5925MHz 1.35 dBi (peak)			
	speed	PIFA	Cable length: 511mm diameter: 1.13mm 50 ohm SLL Coaxial AUX Connector: I-PEX PN:20565-001R-13	617-698MHz -12.96 dBi (peak)	617-698MHz -12.15 dBi (peak)	617-698MHz 3.50 max	617-698MHz 0.81 (peak) dBi
				698-821MHz -5.81 dBi (peak)	698-821MHz -4.93 dBi (peak)	698-821MHz 3.50 max	698-821MHz 0.88 dBi (peak)
				824-960MHz -6.05 dBi (peak)	824-960MHz -5.13 dBi (peak)	824-960MHz 3.50 max	824-960MHz 0.92 dBi (peak)
				1425-1515MHz -0.21 dBi (peak)	1425-1515MHz 0.91 dBi (peak)	1425-1515MHz 3.50 max	1425-1515MHz 1.12 dBi (peak)
				1557-1610 MHz -7.57 dBi (peak)	1557-1610 MHz -6.43 dBi (peak)	1557-1610 MHz 3.50 max	1557-1610 MHz 1.14 dBi (peak)
				1805-2200MHz -4.61 dBi (peak)	1805-2200MHz -3.31 dBi (peak)	1805-2200MHz 3.50 max	1805-2200MHz 1.3 dBi (peak)
				2300-2690MHz -0.42 dBi (peak)	2300-2690MHz 1.01 dBi (peak)	2300-2690MHz 3.50 max	2300-2690MHz 1.43 dBi (peak)

				3400-3800MHz -2.9 dBi (peak)	3400-3800MHz -1.21 dBi (peak)	3400-3800MHz 3.50 max	3400-3800MHz 1.69 dBi (peak)
				4200-4700MHz -2.58 dBi (peak)	4200-4700MHz -0.61 dBi (peak)	4200-4700MHz 3.50 dBi (peak)	4200-4700MHz 1.97 dBi (peak)
				5150-5925MHz -0.91 dBi (peak)	5150-5925MHz 1.26 dBi (peak)	5150-5925MHz 3.50 max	5150-5925MHz 2.17 dBi (peak)

1A Antenna Part Number	1B Manufacture	1C Antenna Type	1D Cable Assembly Part Number and Information	1E *Peak Gain W/ Cable loss (dBi)	1F Peak Gain w/o Cable Loss (dBi)	1G VSWR	1H Cable Loss (dBi)	
Antenna speed P/N: F-0G-FH-6155-004-00 Customer P/N: DC33002R91L	speed	Coupled	Cable length: 147.5mm diameter: 1.13mm 50 ohm LL Coaxial Connector: I-PEX PN:20565-001R-13	1425-1515MHz -2.58 dBi (peak)	1425-1515MHz -2.26 dBi (peak)	1425-1515MHz 3.5 max	1425-1515MHz 0.32 dBi (peak)	
				1710-2200MHz -2.23 dBi (peak)	1710-2200MHz -1.85 dBi (peak)	1710-2200MHz 3.5 max	1710-2200MHz 0.38 dBi (peak)	
				2300-2690MHz -1.40 dBi (peak)	2300-2690MHz -0.99 dBi (peak)	2300-2690MHz 3.5 max	2300-2690MHz 0.41 dBi (peak)	
				3400-3800MHz 0.02 dBi (peak)	3400-3800MHz 0.51 dBi (peak)	3400-3800MHz 3.5 max	3400-3800MHz 0.49 dBi (peak)	
		speed	Coupled	Cable length: 218mm diameter: 1.13mm 50 ohm LL Coaxial Connector: I-PEX PN:20565-001R-13	4200-5000MHz 0.09 dBi (peak)	4200-5000MHz 0.66 dBi (peak)	4200-5000MHz 3.5 max	4200-5000MHz 0.57 dBi (peak)
	1805-2200MHz -1.65 dBi (peak)				1805-2200MHz -1.1 dBi (peak)	1805-2200MHz 3.5 max	1805-2200MHz 0.55 dBi (peak)	
	2300-2690MHz -0.57 dBi (peak)				2300-2690MHz 0.04 dBi (peak)	2300-2690MHz 3.5 max	2300-2690MHz 0.61 dBi (peak)	
	3400-3800MHz 0.49 dBi (peak)				3400-3800MHz 1.21 dBi (peak)	3400-3800MHz 3.5 max	3400-3800MHz 0.72 dBi (peak)	
				4200-5000MHz -1.05 dBi (peak)	4200-5000MHz -0.21 dBi (peak)	4200-5000MHz 3.5 max	4200-5000MHz 0.84 dBi (peak)	

- Antenna Peak Gain required being test in system basis.
- 1E frame contend absolutely peak antenna gain include H/V

Antenna Peak Gain Table: Low and middle band

Frequency (MHz)	TPx antenna		DRx antenna	
	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)
617	-22.00	-22.72	-15.22	-15.77
634.5	-20.60	-21.40	-14.57	-14.60
652	-18.35	-19.02	-13.34	-12.96
663	-16.83	-16.23		
680.5	-15.41	-14.63		
698	-15.41	-12.87		
703	-15.12	-12.06		
707.5	-14.79	-12.03		
717	-13.79	-12.49	-7.76	-7.81
725.5	-13.22	-12.72	-7.46	-7.29
748	-11.04	-10.98	-9.55	-6.70
756	-10.43	-9.93	-6.81	-6.87
768	-9.41	-8.43	-6.60	-6.00
777	-8.69	-7.72	-5.81	-6.75
782	-8.19	-7.36	-6.11	-6.24
787	-7.87	-7.05	-6.38	-6.57
791			-6.46	-6.66
806			-6.66	-6.30
814	-6.43	-7.34	-6.93	-6.96
821			-7.37	-6.34
824	-7.45	-6.32	-7.35	-6.30
832	-5.91	-6.18	-7.25	-6.30
836.5	-6.07	-6.33	-7.15	-6.19
849	-6.07	-7.74	-6.10	-6.26
862	-6.97	-7.62	-6.05	-7.32
880	-6.45	-8.26	-8.15	-8.09
897.5	-6.90	-8.63	-9.36	-8.51
915	-8.17	-9.42	-9.71	-8.93
925	-8.62	-9.55	-9.87	-9.11
960	-10.31	-8.41	-10.60	-9.64
1427.9	-10.86	-9.93	-0.21	-6.99
1447.9	-10.42	-9.99	-1.78	-6.72
1455.4	-10.59	-9.97	-2.55	-6.61
1462.9	-10.50	-9.90	-3.17	-6.71
1496	-10.17	-10.56	-4.10	-6.72
1510.9	-10.93	-10.17	-4.02	-5.84
1557			-7.57	-8.06

1575			-8.07	-8.19
1610			-8.78	-8.06

High band

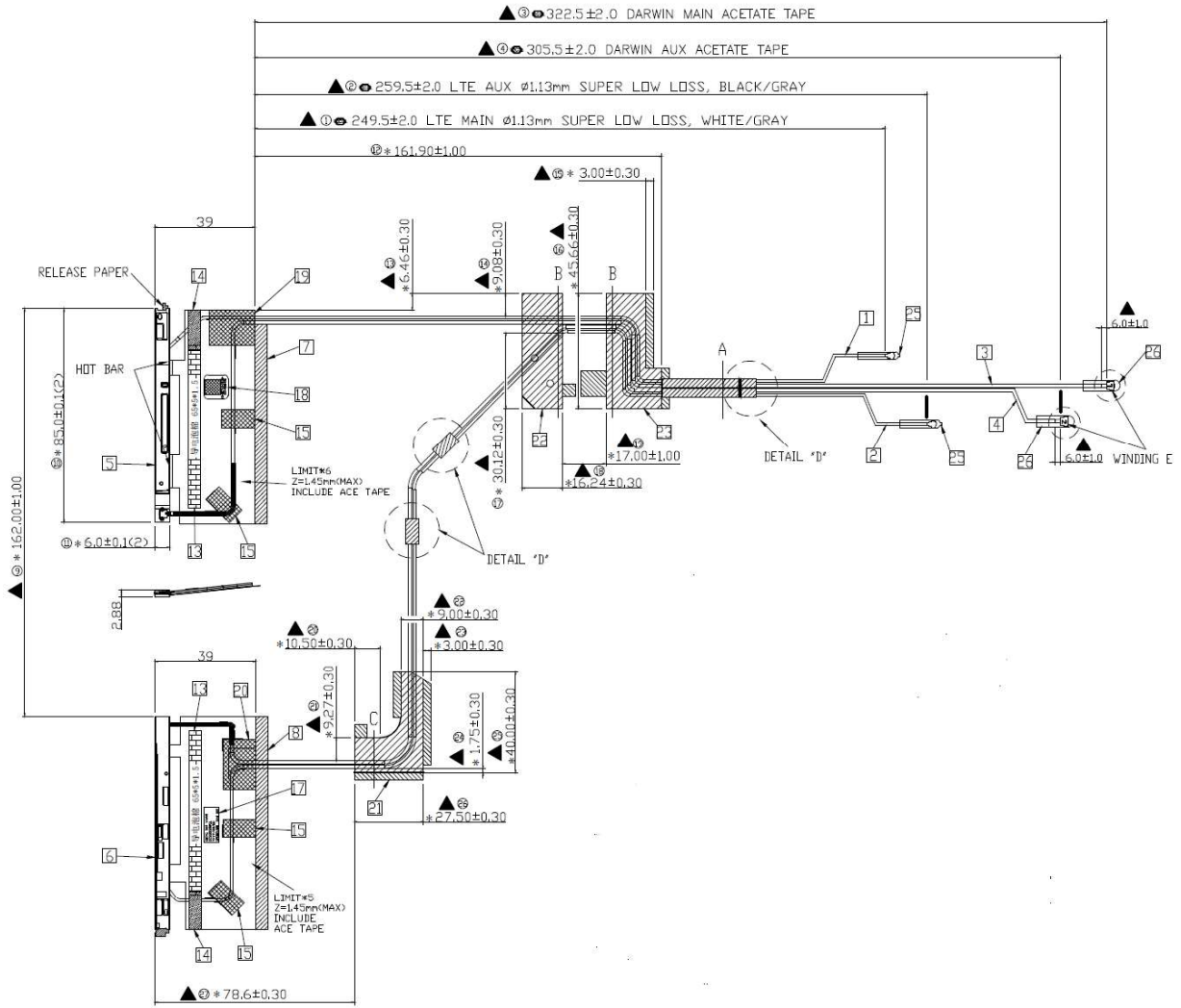
Frequency (MHz)	TPx antenna		DRx antenna	
	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)
1710	-5.61	-5.83		
1732.5	-5.04	-5.46		
1747.5	-4.76	-5.61		
1755	-4.78	-5.55		
1785	-4.93	-5.74		
1805	-5.13	-5.42	-8.40	-5.78
1850	-5.05	-5.40	-8.09	-9.06
1880	-4.33	-4.85	-6.46	-6.66
1910	-4.58	-4.08	-6.29	-6.31
1920	-4.52	-3.60	-6.20	-6.04
1950	-4.61	-4.20	-4.83	-5.36
1980	-4.60	-4.04	-4.89	-5.23
2110	-4.71	-4.35	-5.45	-5.12
2200	-4.09	-4.75	-4.61	-5.07
2300	-2.62	-2.46	-0.42	-1.79
2305	-2.39	-2.50	-0.53	-1.93
2315	-1.99	-2.74	-0.79	-2.03
2350	-2.30	-5.29	-1.85	-3.28
2400	-3.93	-4.99	-1.70	-3.23
2500	-5.67	-7.52	-1.33	-3.76
2570	-6.04	-8.26	-1.98	-4.08
2595	-6.14	-8.10	-1.86	-4.42
2620	-5.97	-7.00	-1.77	-4.46
2690	-5.38	-5.61	-1.01	-3.01
3400	-5.07	-5.51	-3.16	-4.14
3500	-8.51	-10.03	-2.90	-4.31
3600	-5.61	-6.80	-3.33	-5.39
3700	-6.18	-5.23	-4.16	-5.87
3800	-7.21	-6.17	-7.43	-7.35
4200	-5.48	-6.85	-5.02	-6.66
4400	-4.17	-5.98	-2.58	-3.04
4700	-3.53	-3.79	-4.78	-2.92
5150	-2.76	-2.99	-0.91	-1.17
5537.5	-2.39	-2.76	-5.69	-5.03
5925	-3.19	-3.46	-4.76	-5.06

Frequency (MHz)	DRx2 antenna		DRx1 antenna	
	Horizontal (dBi)	Vertical (dBi)	Horizontal (dBi)	Vertical (dBi)
1452	-3.27	-3.38		
1474	-3.00	-3.60		
1496	-2.58	-3.46		
1710	-3.37	-3.55		
1732.5	-3.67	-4.30		
1747.5	-3.73	-4.26		
1755	-2.97	-4.42		
1785	-3.64	-5.39		
1805	-2.58	-5.55	-2.63	-4.98
1850	-3.40	-4.41	-2.56	-4.49
1880	-3.37	-3.28	-1.65	-3.57
1910	-3.39	-3.28	-1.90	-2.74
1920	-3.40	-2.96	-2.18	-2.54
1950	-3.45	-2.82	-2.01	-3.26
1980	-3.17	-2.23	-2.00	-4.24
2110	-2.86	-2.69	-3.05	-4.79
2200	-3.26	-3.03	-2.50	-3.11
2300	-2.08	-1.76	-0.57	-3.11
2305	-2.19	-1.87	-1.32	-2.92
2315	-2.32	-1.40	-1.11	-2.72
2350	-2.25	-1.83	-1.48	-3.13
2400	-2.53	-1.59	-1.18	-2.87
2500	-2.17	-2.54	-1.13	-0.81
2570	-1.66	-3.05	-1.67	-3.17
2595	-2.24	-2.64	-1.81	-3.17
2620	-3.07	-2.44	-1.99	-2.77
2690	-2.24	-2.25	-1.41	-2.92
3400	0.02	-0.46	0.49	-2.19
3500	-0.16	-0.11	-0.25	-1.66
3600	0.49	-0.29	-0.01	-2.33
3700	-2.29	-3.39	0.45	-3.10
3800	0.01	-1.41	-0.63	-2.48
4200	-0.74	0.09	-1.58	-1.51
4400	-0.37	-0.72	-1.54	-1.05
4700	-0.91	-2.48	-1.49	-1.37
5000	-1.99	-1.72	-3.91	-4.09

Section 2. Dimensioned Photos or Drawings of Antennas

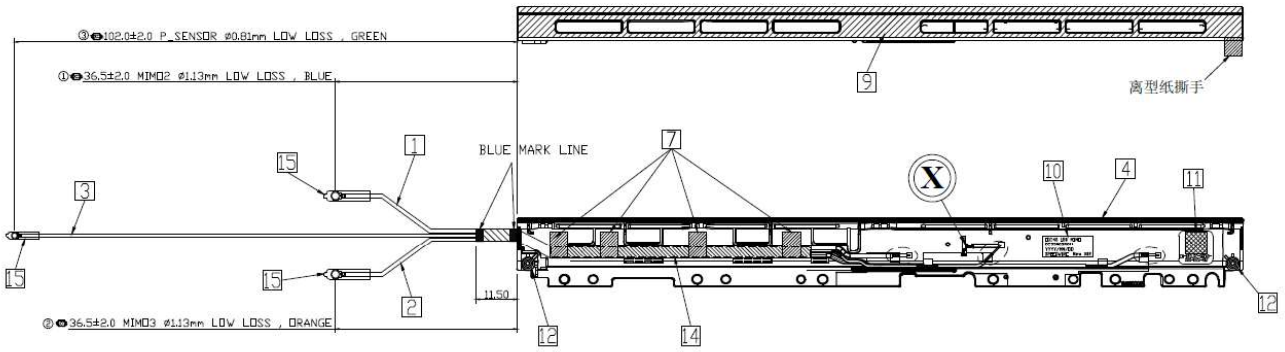
Include a dimensioned photo and dimensioned drawing of Main antenna here.

TPx Antenna Dimensioned Drawing:



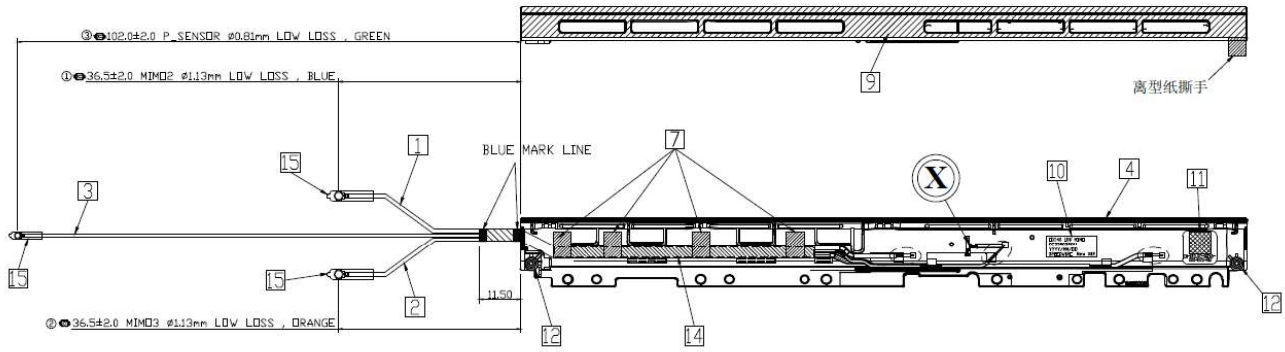
Include a dimensioned photo and dimensioned drawing of Aux antenna here.

DRx2 Antenna Dimensioned Drawing:



Include a dimensioned photo and dimensioned drawing of Aux antenna here.

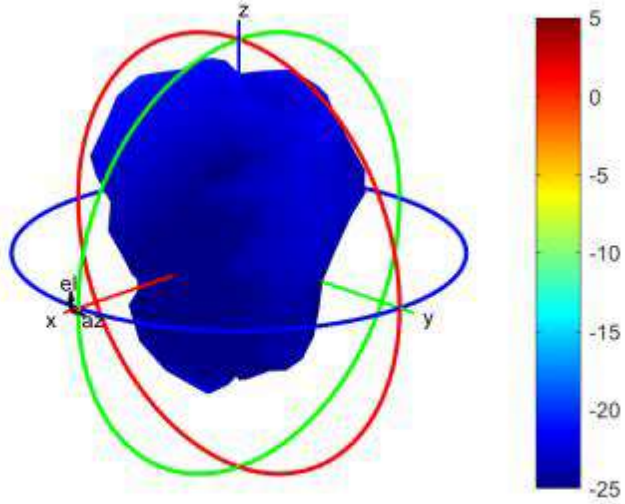
DRx1 Antenna Dimensioned Drawing:



Section 3. Radiation characteristics of antennae Loaded in Host Platform

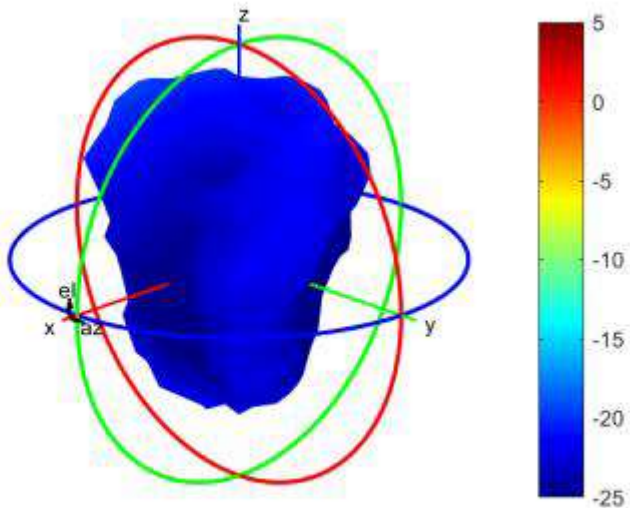
WWAN Main Antenna (TPx)

617MHz



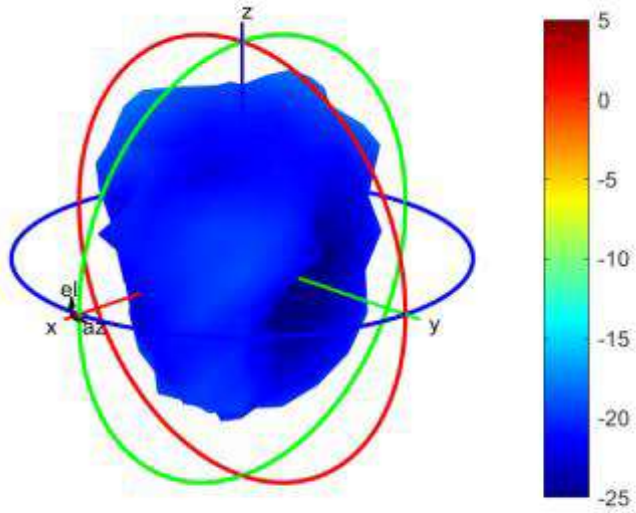
Center Frequency	617 MHz
Horizontal (dBi) peak	-22.00
Vertical (dBi) peak	-22.72

634.5MHz



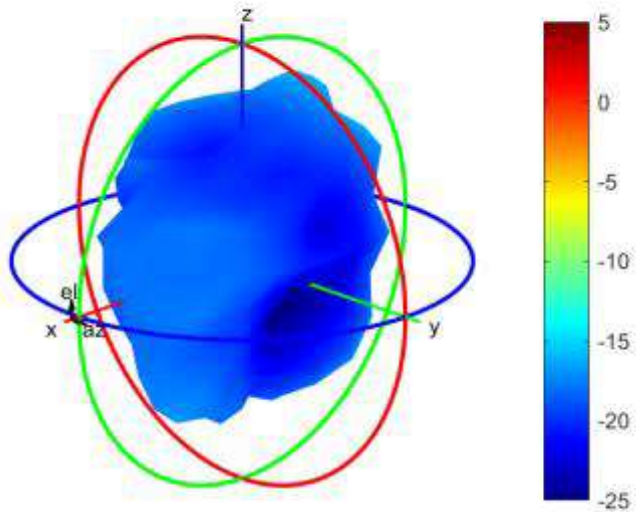
Center Frequency	634.5MHz
Horizontal (dBi) peak	-20.60
Vertical (dBi) peak	-21.40

652MHz



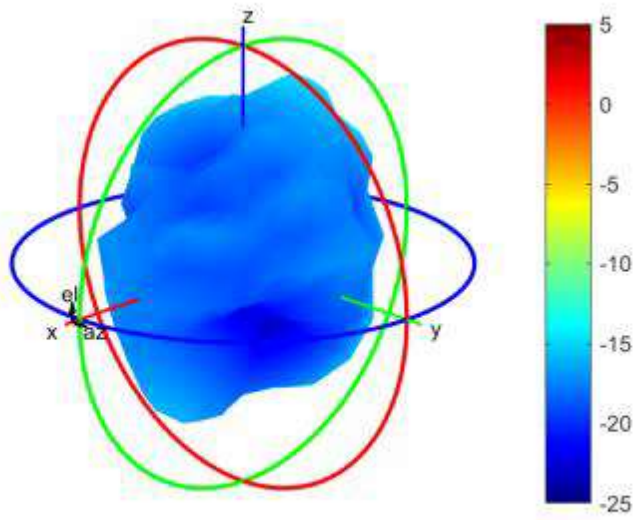
Center Frequency	652MHz
Horizontal (dBi) peak	-18.35
Vertical (dBi) peak	-19.02

663MHz



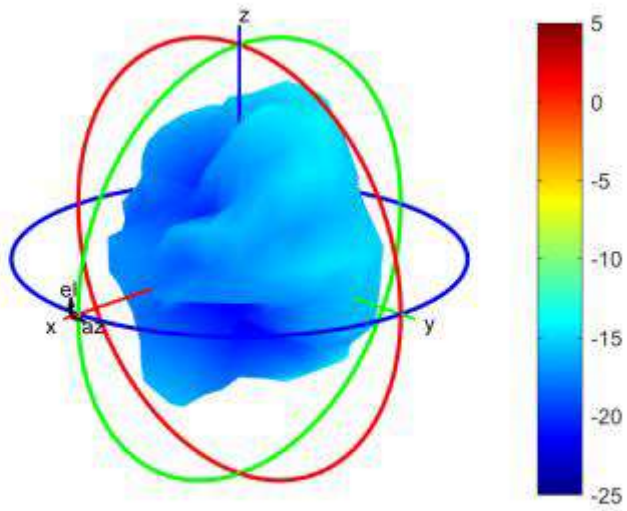
Center Frequency	663MHz
Horizontal (dBi) peak	-16.83
Vertical (dBi) peak	-16.23

680.5MHz



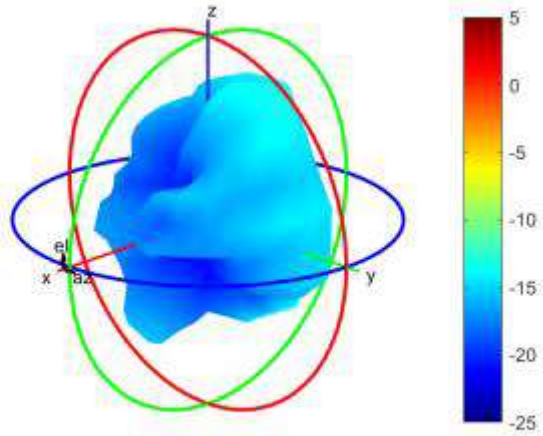
Center Frequency	680.5 MHz
Horizontal (dBi) peak	-15.41
Vertical (dBi) peak	-14.63

698MHz



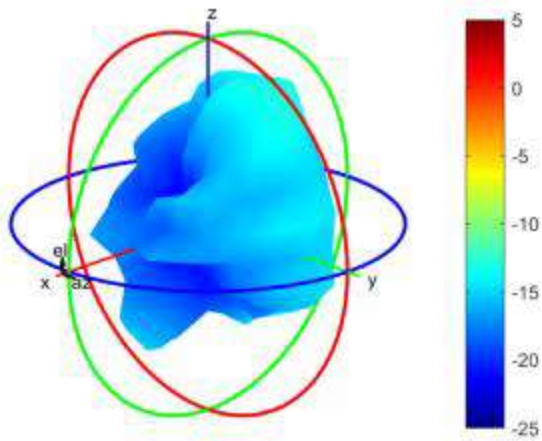
Center Frequency	698MHz
Horizontal (dBi) peak	-15.41
Vertical (dBi) peak	-12.87

703MHz



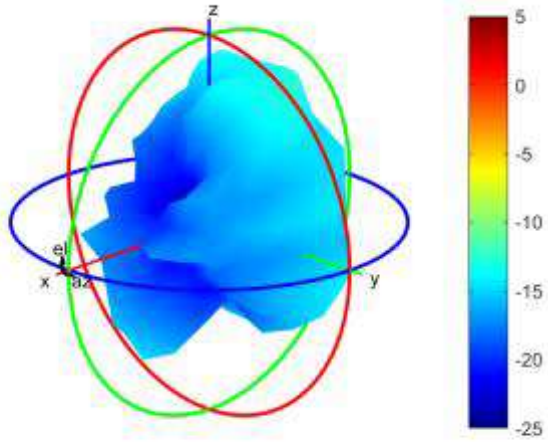
Center Frequency	703 MHz
Horizontal (dBi) peak	-15.12
Vertical (dBi) peak	-12.06

707.5MHz



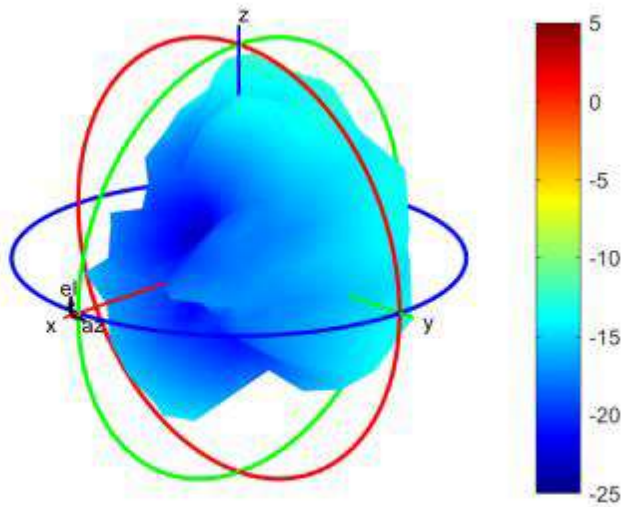
Center Frequency	707.5MHz
Horizontal (dBi) peak	-14.79
Vertical (dBi) peak	-12.03

717MHz



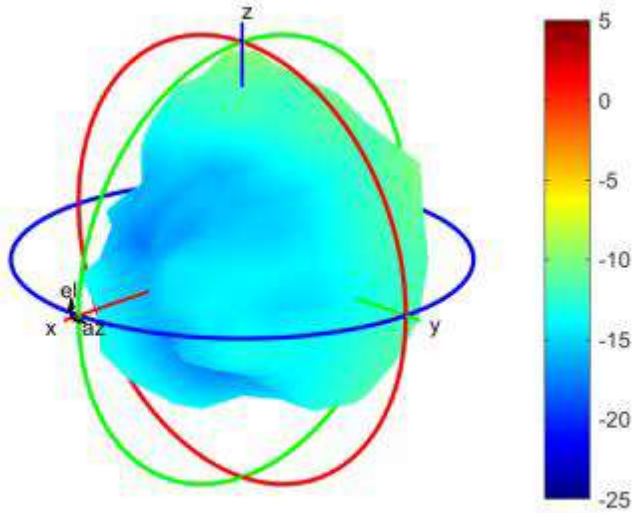
Center Frequency	717MHz
Horizontal (dBi) peak	13.79
Vertical (dBi) peak	-12.49

725.5MHz



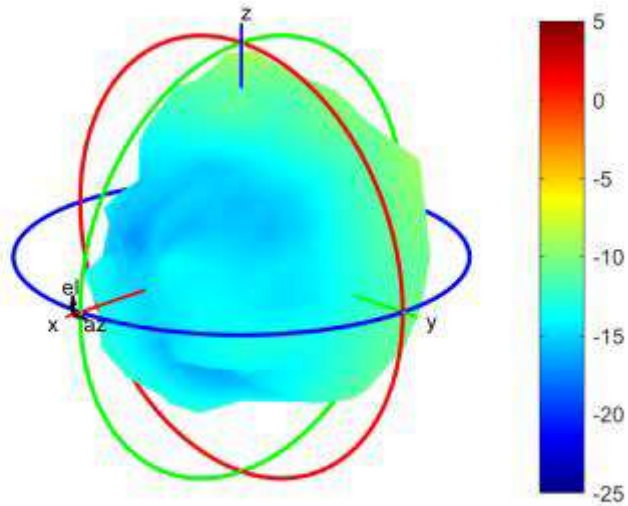
Center Frequency	725.5MHz
Horizontal (dBi) peak	-13.22
Vertical (dBi) peak	-12.72

748MHz



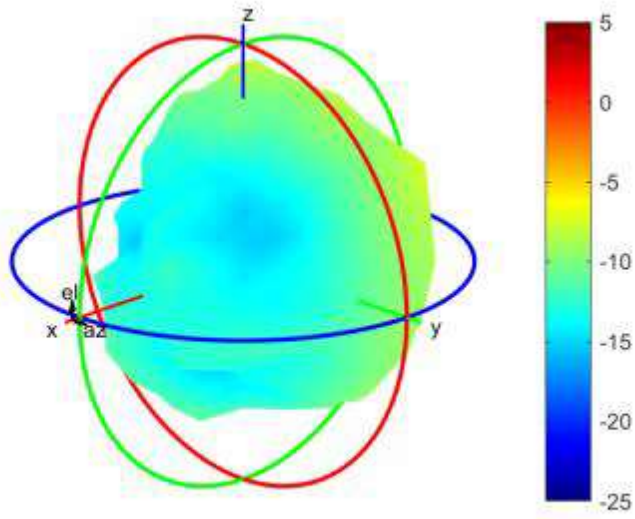
Center Frequency	748MHz
Horizontal (dBi) peak	-11.04
Vertical (dBi) peak	-10.98

756MHz



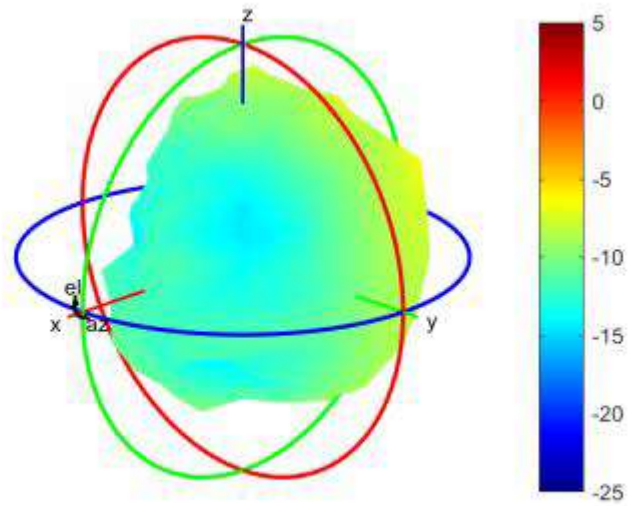
Center Frequency	756MHz
Horizontal (dBi) peak	-10.43
Vertical (dBi) peak	-9.93

768MHz



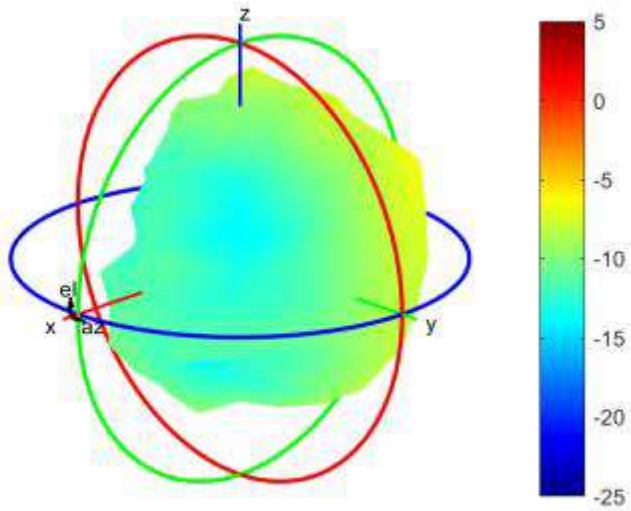
Center Frequency	768MHz
Horizontal (dBi) peak	-9.41
Vertical (dBi) peak	-8.43

777MHz



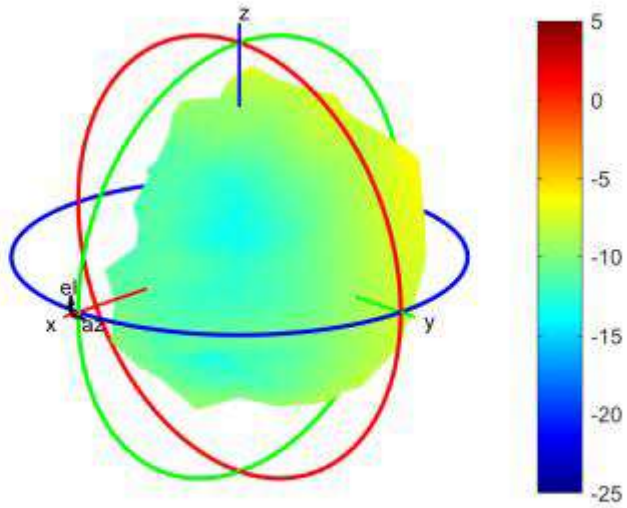
Center Frequency	777MHz
Horizontal (dBi) peak	-8.69
Vertical (dBi) peak	-7.72

782MHz



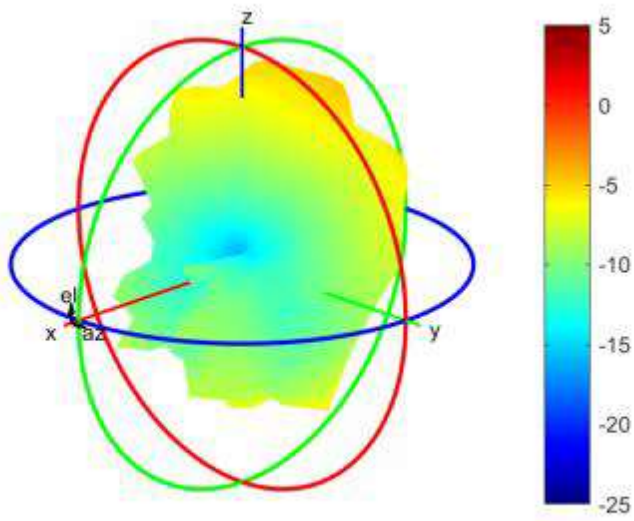
Center Frequency	782MHz
Horizontal (dBi) peak	-8.19
Vertical (dBi) peak	-7.36

787MHz



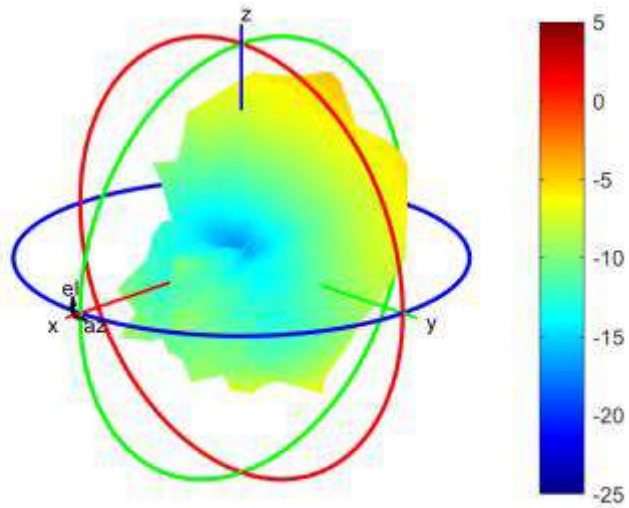
Center Frequency	787MHz
Horizontal (dBi) peak	-7.87
Vertical (dBi) peak	-7.05

814MHz



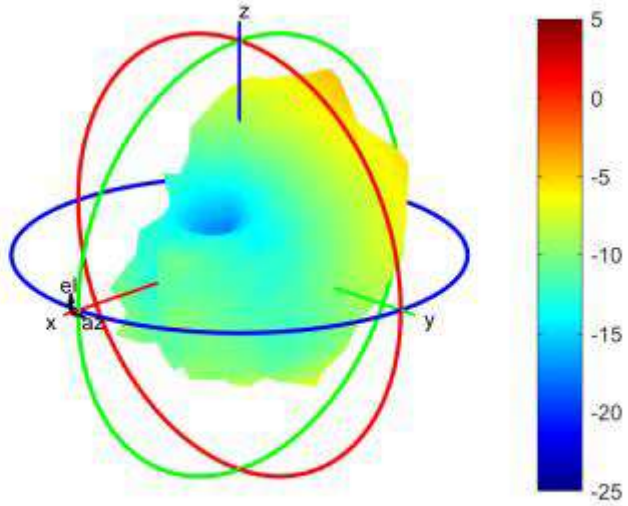
Center Frequency	814MHz
Horizontal (dBi) peak	-6.43
Vertical (dBi) peak	-7.34

824MHz



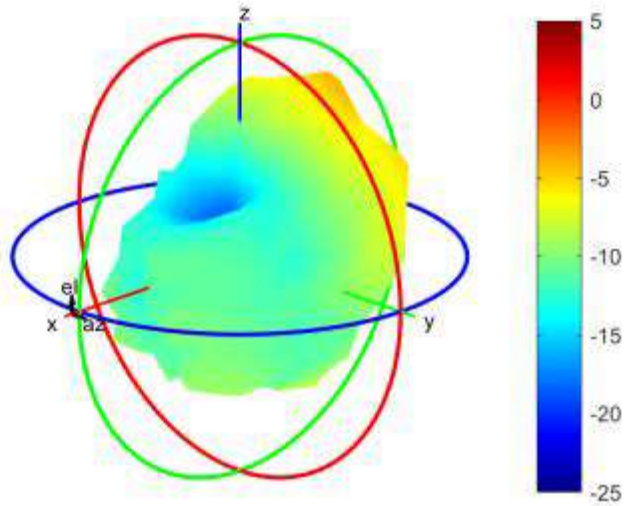
Center Frequency	824MHz
Horizontal (dBi) peak	-7.45
Vertical (dBi) peak	-6.32

832MHz



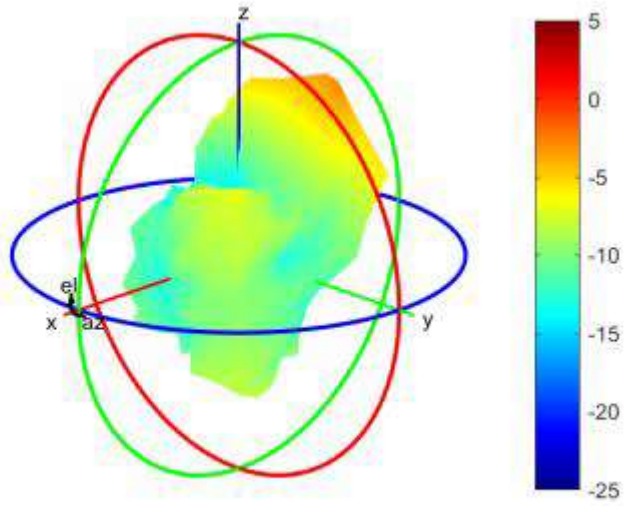
Center Frequency	832MHz
Horizontal (dBi) peak	-5.91
Vertical (dBi) peak	-6.18

836.5MHz



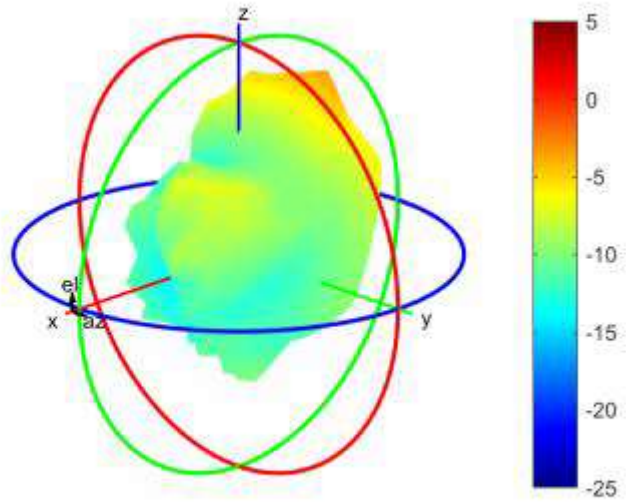
Center Frequency	836.5MHz
Horizontal (dBi) peak	-6.07
Vertical (dBi) peak	-6.33

849MHz



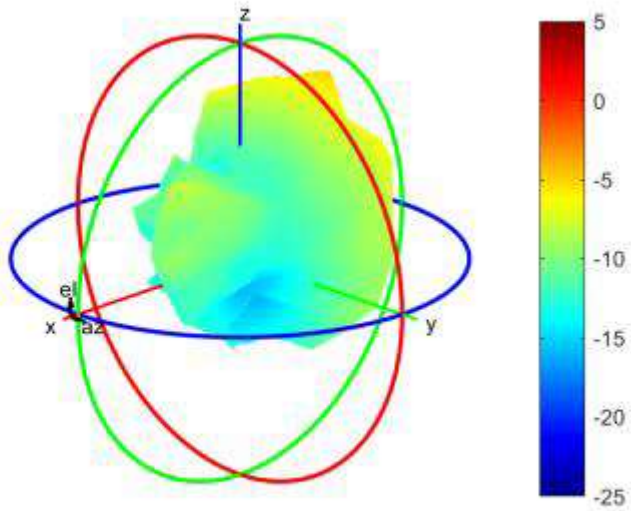
Center Frequency	849MHz
Horizontal (dBi) peak	-6.07
Vertical (dBi) peak	-7.74

862MHz



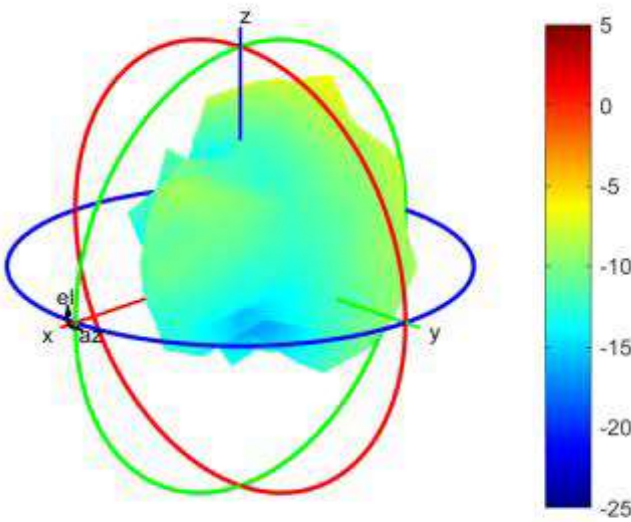
Center Frequency	862MHz
Horizontal (dBi) peak	-6.97
Vertical (dBi) peak	-7.62

880MHz



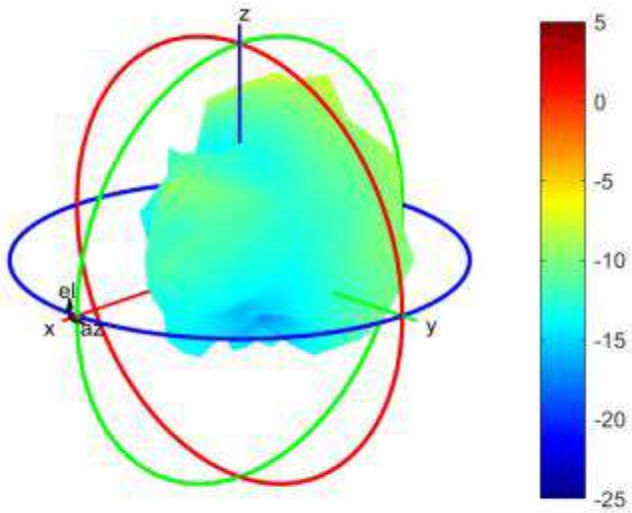
Center Frequency	880MHz
Horizontal (dBi) peak	-6.45
Vertical (dBi) peak	-8.26

897.5MHz



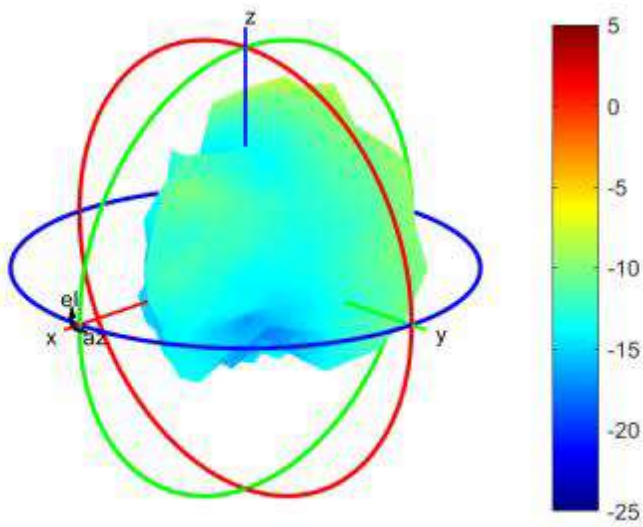
Center Frequency	897.5MHz
Horizontal (dBi) peak	-6.90
Vertical (dBi) peak	-8.63

915MHz



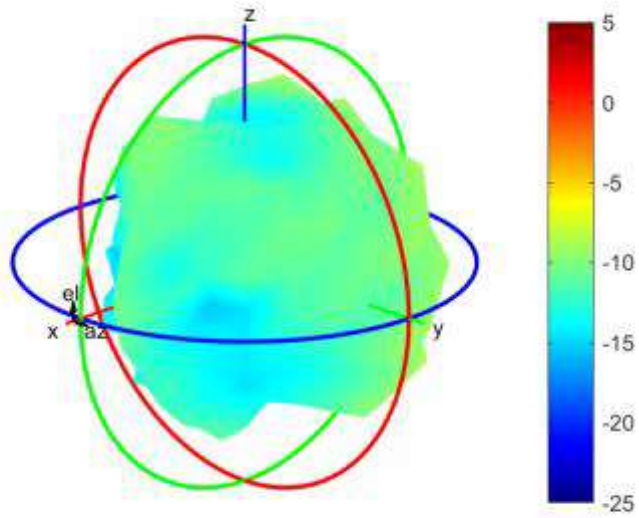
Center Frequency	915MHz
Horizontal (dBi) peak	-8.17
Vertical (dBi) peak	-9.42

925MHz



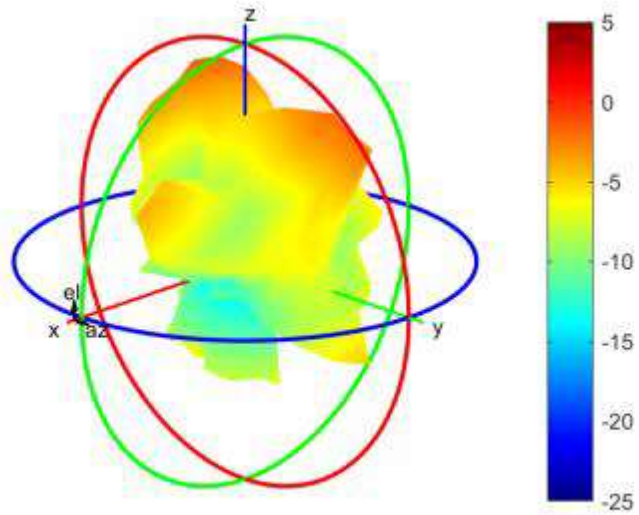
Center Frequency	925MHz
Horizontal (dBi) peak	-8.62
Vertical (dBi) peak	-9.55

960MHz



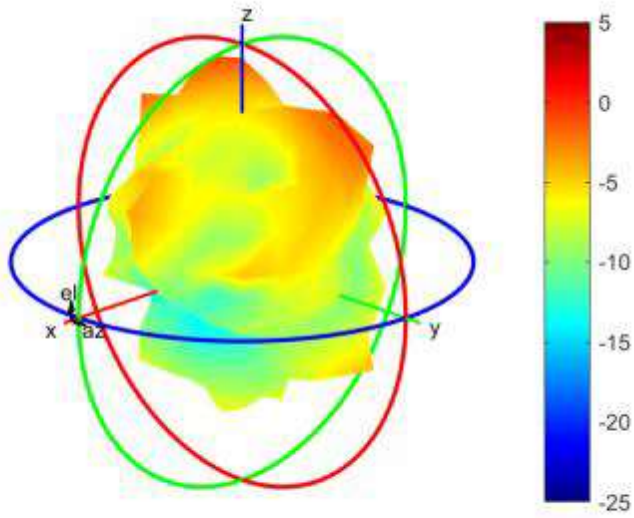
Center Frequency	960MHz
Horizontal (dBi) peak	-10.31
Vertical (dBi) peak	-8.41

1427.9MHz



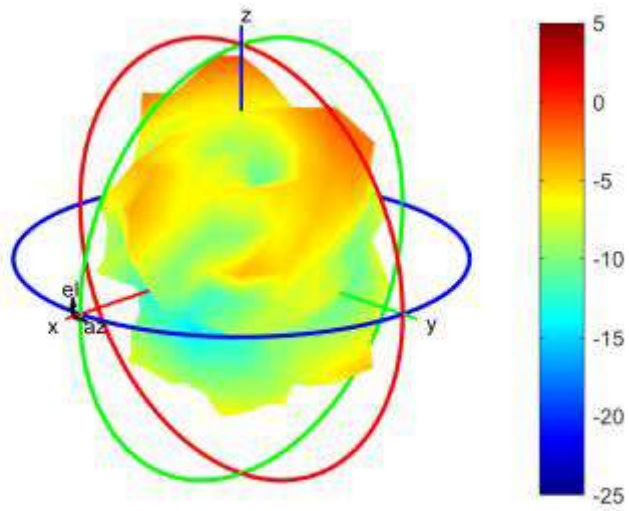
Center Frequency	1427.9MHz
Horizontal (dBi) peak	-10.86
Vertical (dBi) peak	-9.93

1447.9MHz



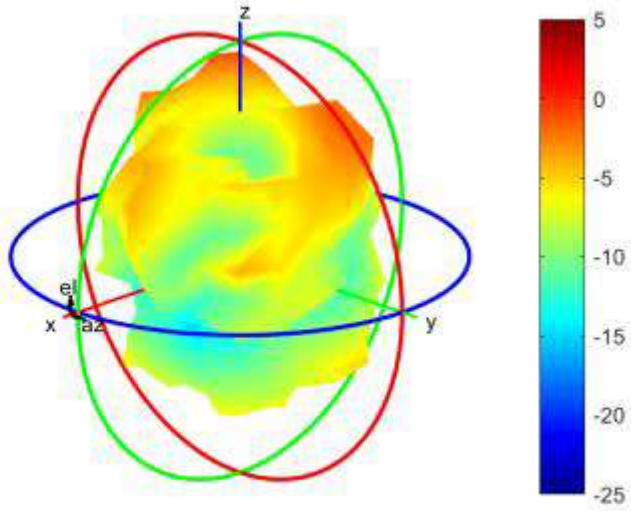
Center Frequency	1447.9MHz
Horizontal (dBi) peak	-10.42
Vertical (dBi) peak	-9.99

1455.4MHz



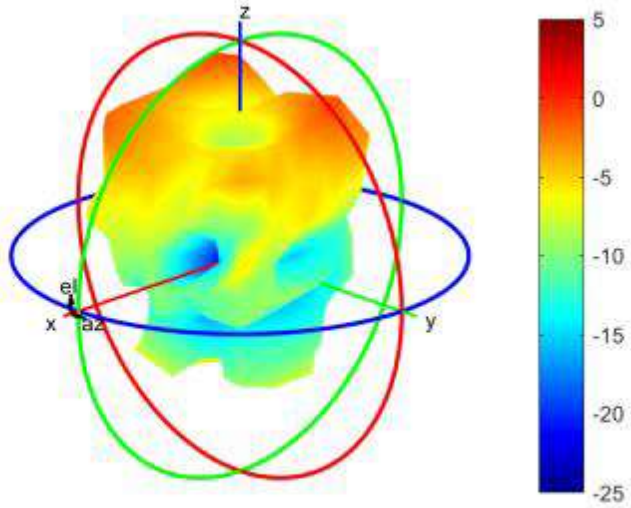
Center Frequency	1455.4MHz
Horizontal (dBi) peak	-10.59
Vertical (dBi) peak	-9.97

1462.9MHz



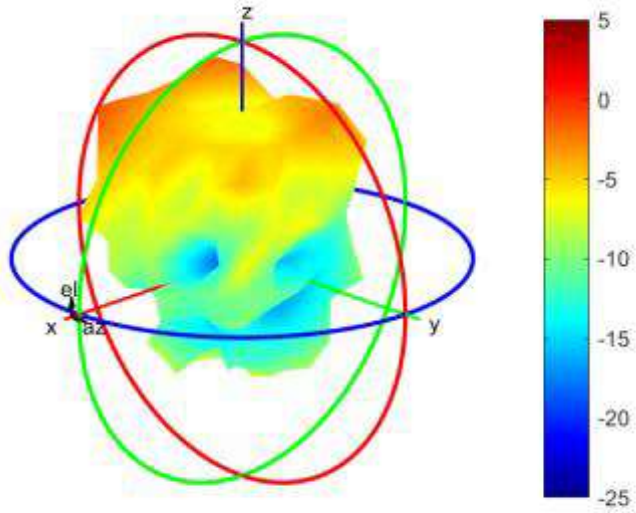
Center Frequency	1462.9MHz
Horizontal (dBi) peak	-10.50
Vertical (dBi) peak	-9.90

1496MHz



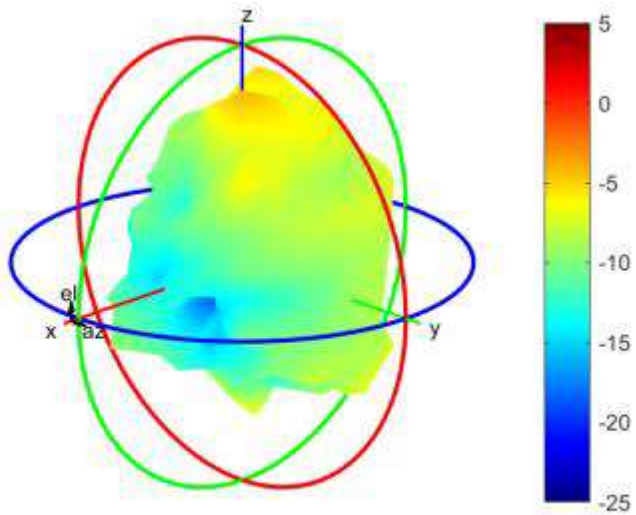
Center Frequency	1496MHz
Horizontal (dBi) peak	-10.17
Vertical (dBi) peak	-10.56

1510.9 MHz



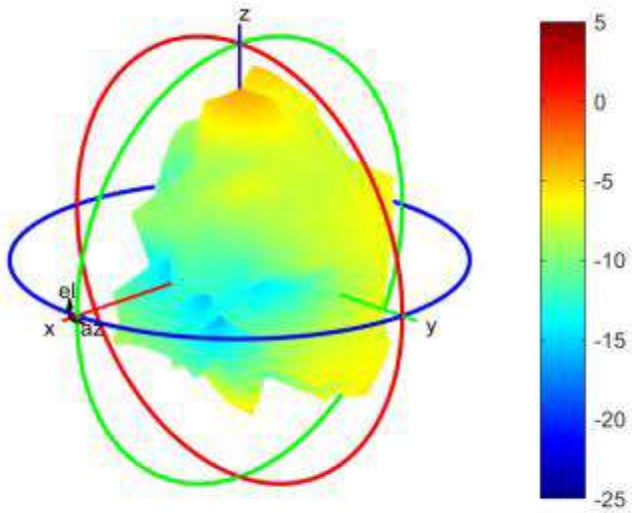
Center Frequency	1510.9 MHz
Horizontal (dBi) peak	-10.93
Vertical (dBi) peak	-10.17

1710 MHz



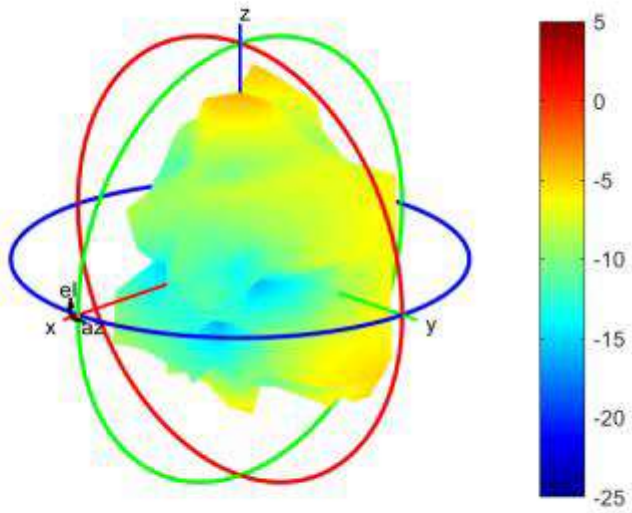
Center Frequency	1710 MHz
Horizontal (dBi) peak	-5.61
Vertical (dBi) peak	-5.83

1732.5 MHz



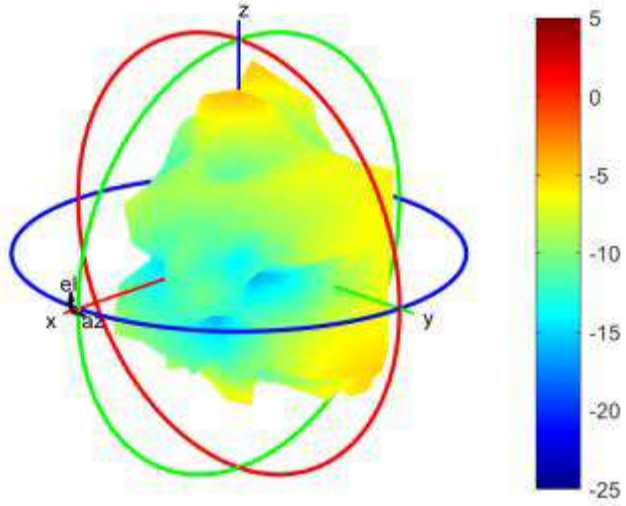
Center Frequency	1732.5 MHz
Horizontal (dBi) peak	-5.04
Vertical (dBi) peak	-5.46

1747.5 MHz



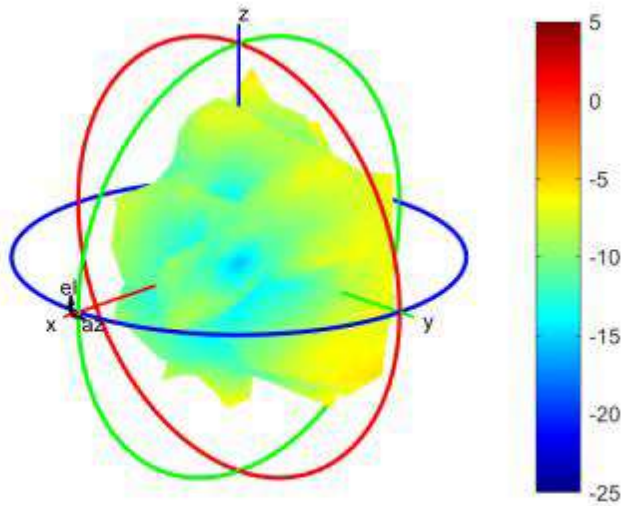
Center Frequency	1747.5 MHz
Horizontal (dBi) peak	-4.76
Vertical (dBi) peak	-5.61

1755 MHz



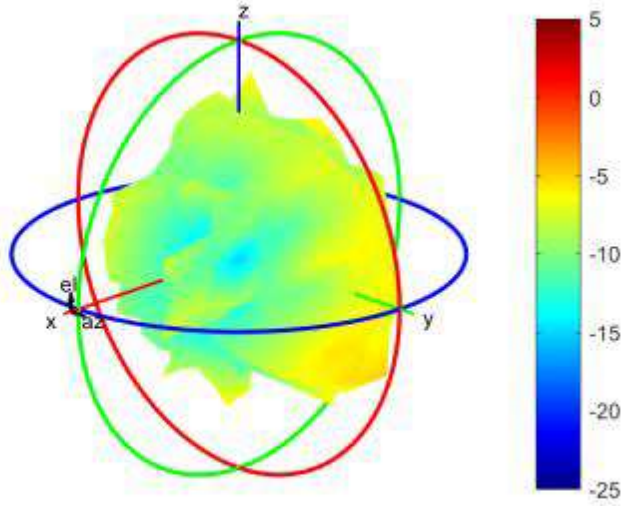
Center Frequency	1755 MHz
Horizontal (dBi) peak	-4.78
Vertical (dBi) peak	-5.55

1785 MHz



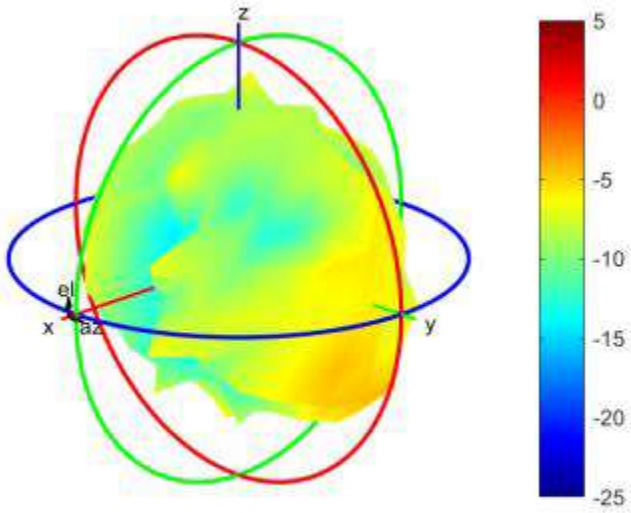
Center Frequency	1785 MHz
Horizontal (dBi) peak	-4.93
Vertical (dBi) peak	-5.74

1805 MHz



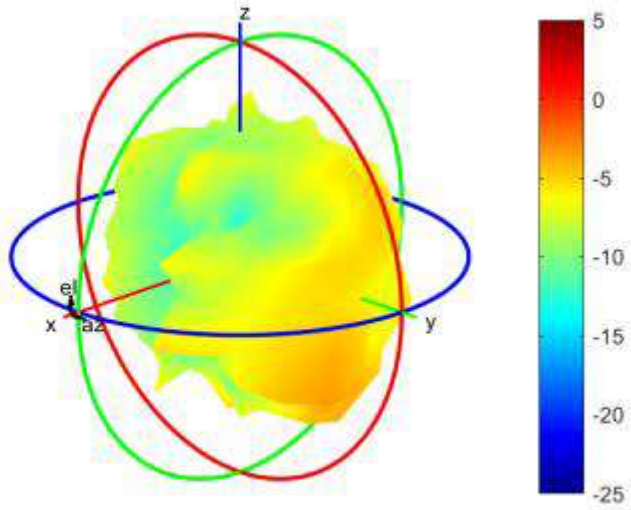
Center Frequency	1805 MHz
Horizontal (dBi) peak	-5.13
Vertical (dBi) peak	-5.42

1850 MHz



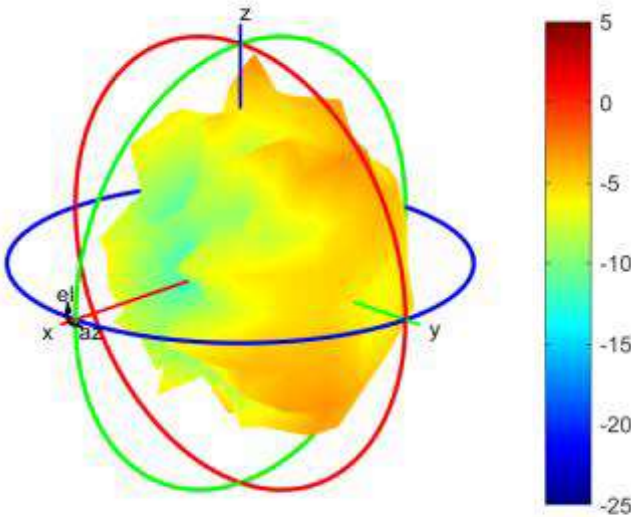
Center Frequency	1850 MHz
Horizontal (dBi) peak	-5.05
Vertical (dBi) peak	-5.40

1880 MHz



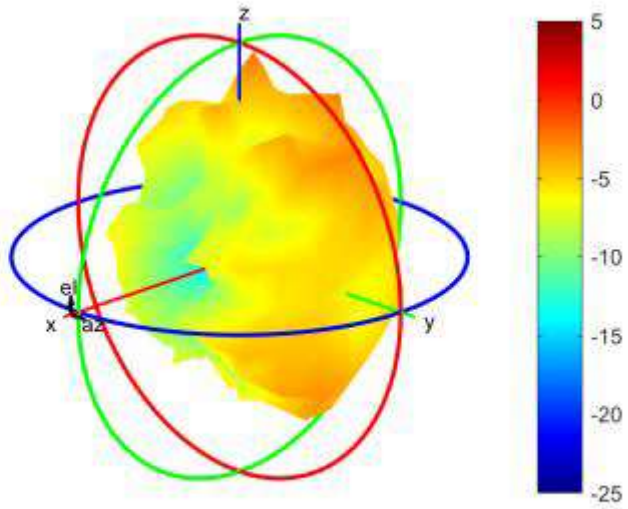
Center Frequency	1880 MHz
Horizontal (dBi) peak	-4.33
Vertical (dBi) peak	-4.85

1910MHz



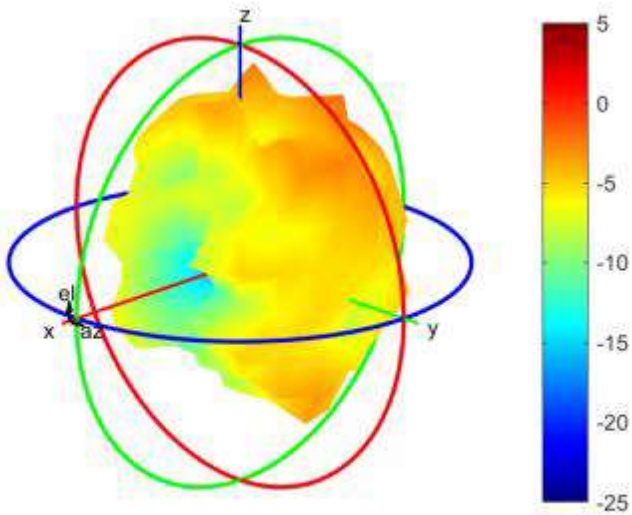
Center Frequency	1910MHz
Horizontal (dBi) peak	-4.58
Vertical (dBi) peak	-4.08

1920MHz



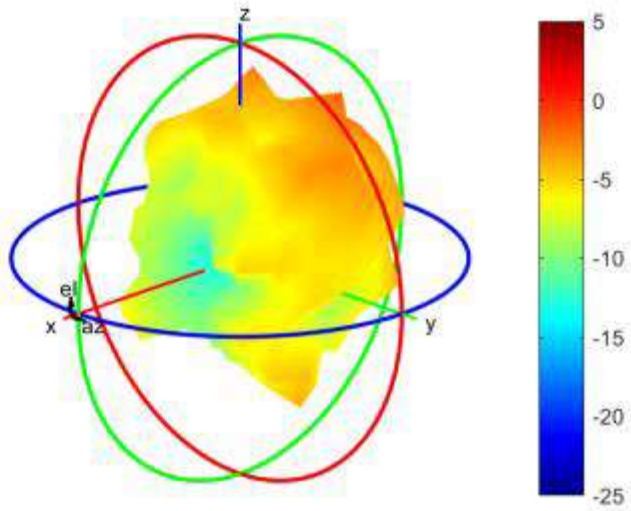
Center Frequency	1920MHz
Horizontal (dBi) peak	-4.52
Vertical (dBi) peak	-3.60

1950MHz



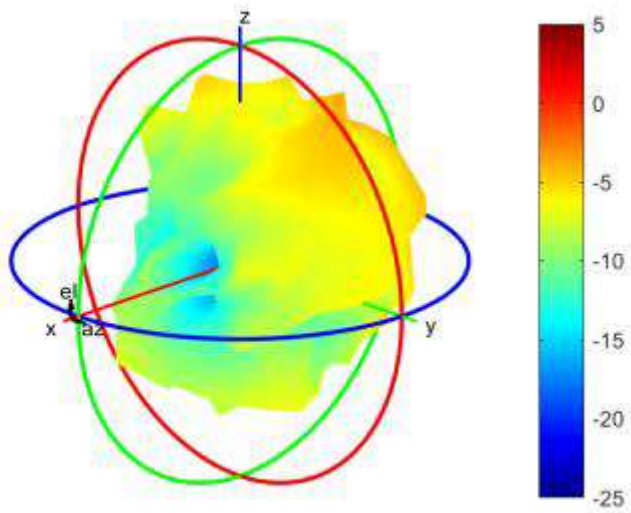
Center Frequency	1950MHz
Horizontal (dBi) peak	-4.61
Vertical (dBi) peak	-4.20

1980MHz



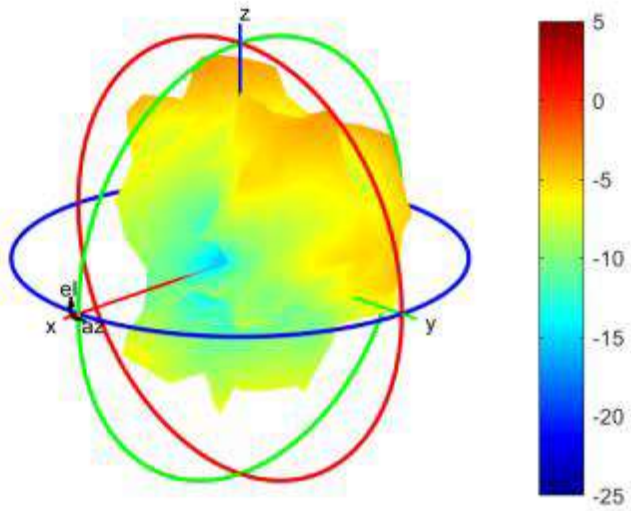
Center Frequency	1980MHz
Horizontal (dBi) peak	-4.60
Vertical (dBi) peak	-4.04

2110MHz



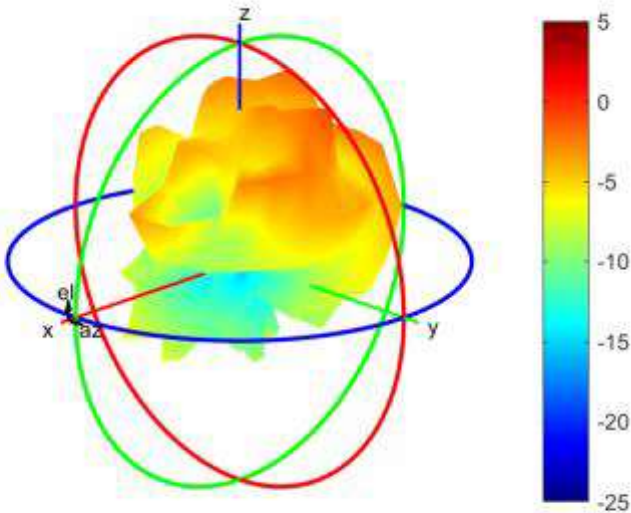
Center Frequency	2110MHz
Horizontal (dBi) peak	-4.71
Vertical (dBi) peak	-4.35

2200MHz



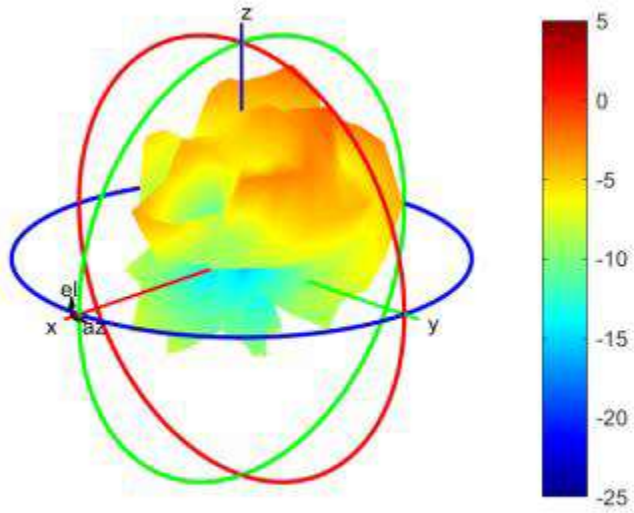
Center Frequency	2200MHz
Horizontal (dBi) peak	-4.09
Vertical (dBi) peak	-4.75

2300MHz



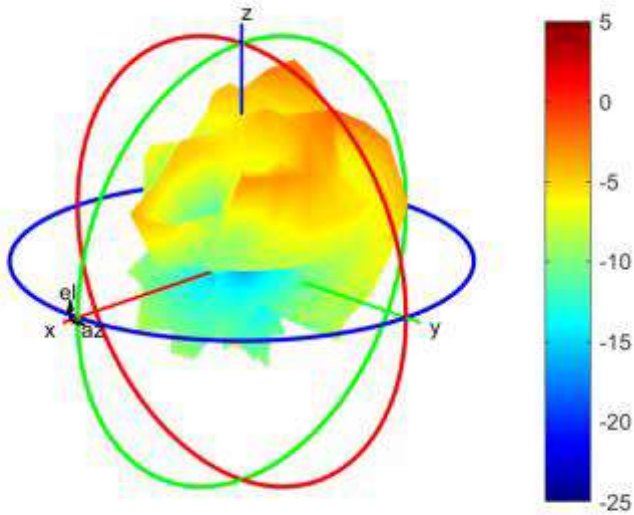
Center Frequency	2300MHz
Horizontal (dBi) peak	-2.62
Vertical (dBi) peak	-2.46

2305MHz



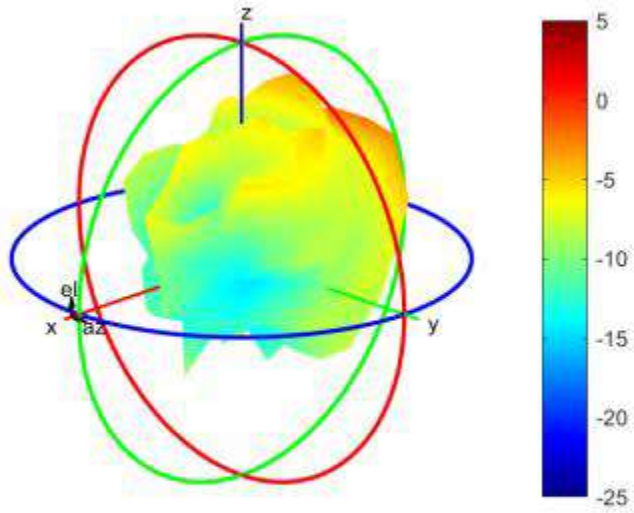
Center Frequency	2305MHz
Horizontal (dBi) peak	-2.39
Vertical (dBi) peak	-2.50

2315MHz



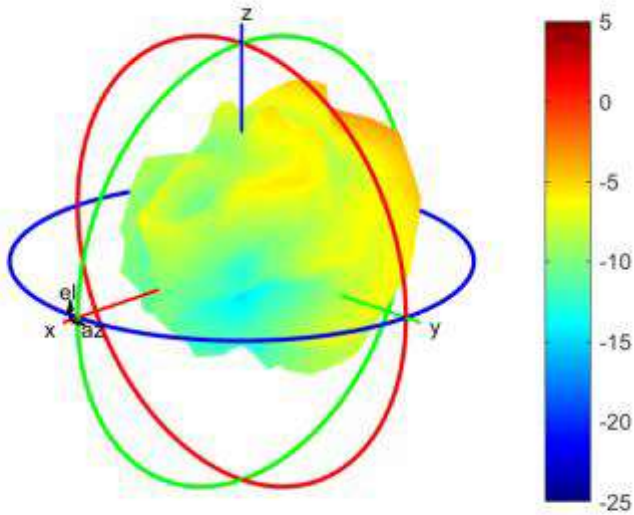
Center Frequency	2315MHz
Horizontal (dBi) peak	-1.99
Vertical (dBi) peak	-2.74

2350MHz



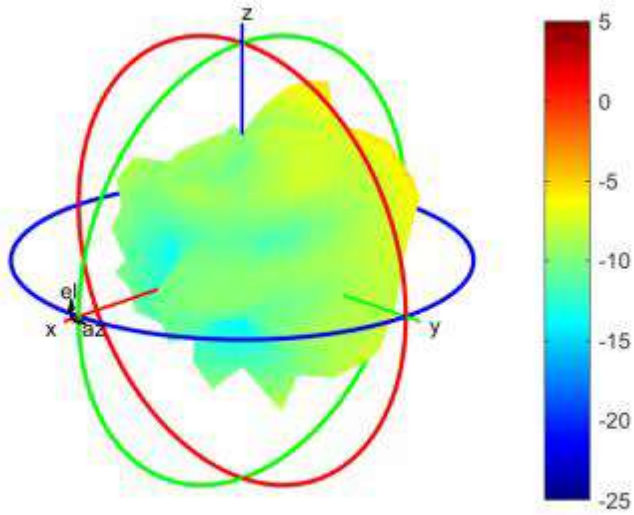
Center Frequency	2350MHz
Horizontal (dBi) peak	-2.30
Vertical (dBi) peak	-5.29

2400MHz



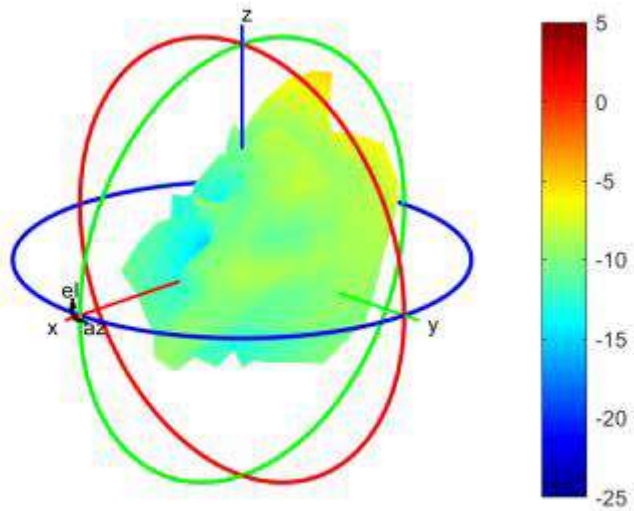
Center Frequency	2400MHz
Horizontal (dBi) peak	-3.93
Vertical (dBi) peak	-4.99

2500MHz



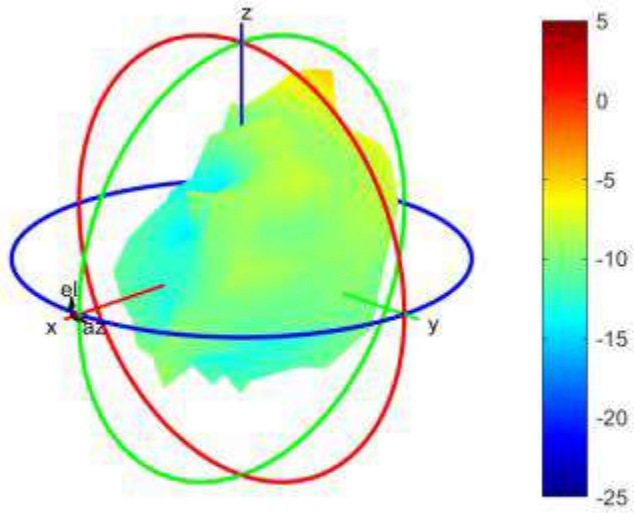
Center Frequency	2500MHz
Horizontal (dBi) peak	-5.67
Vertical (dBi) peak	-7.52

2570MHz



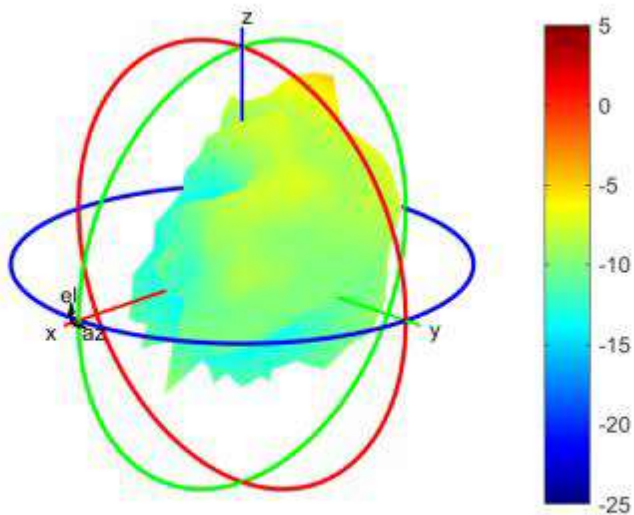
Center Frequency	2570MHz
Horizontal (dBi) peak	-6.04
Vertical (dBi) peak	-8.26

2595MHz



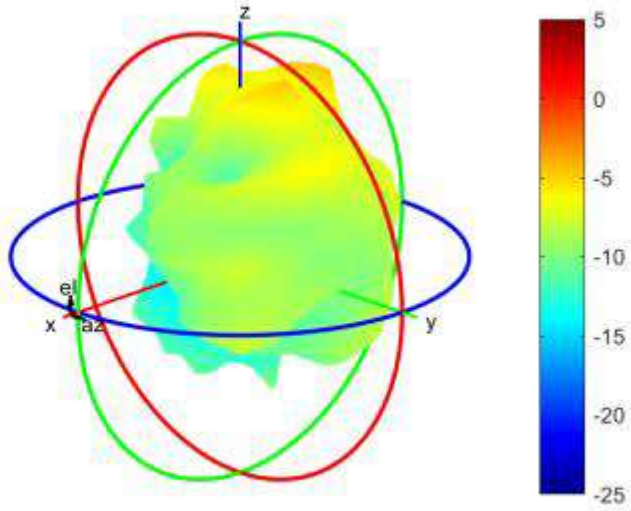
Center Frequency	2595MHz
Horizontal (dBi) peak	-6.14
Vertical (dBi) peak	-8.10

2620MHz



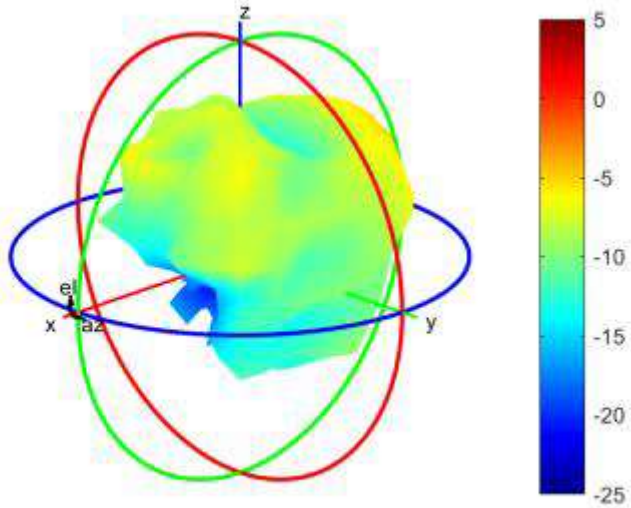
Center Frequency	2620MHz
Horizontal (dBi) peak	-5.97
Vertical (dBi) peak	-7.00

2690MHz



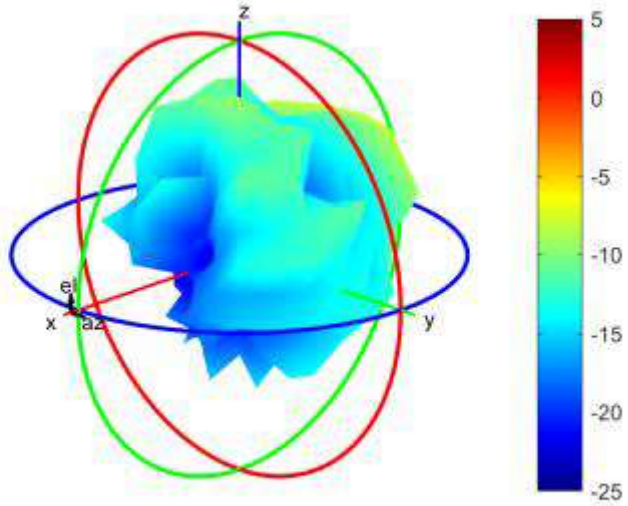
Center Frequency	2690MHz
Horizontal (dBi) peak	-5.38
Vertical (dBi) peak	-5.61

3400MHz



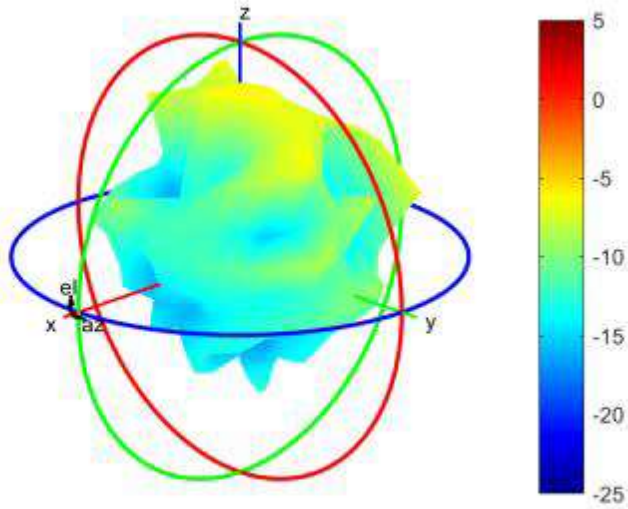
Center Frequency	3400MHz
Horizontal (dBi) peak	-5.07
Vertical (dBi) peak	-5.51

3500MHz



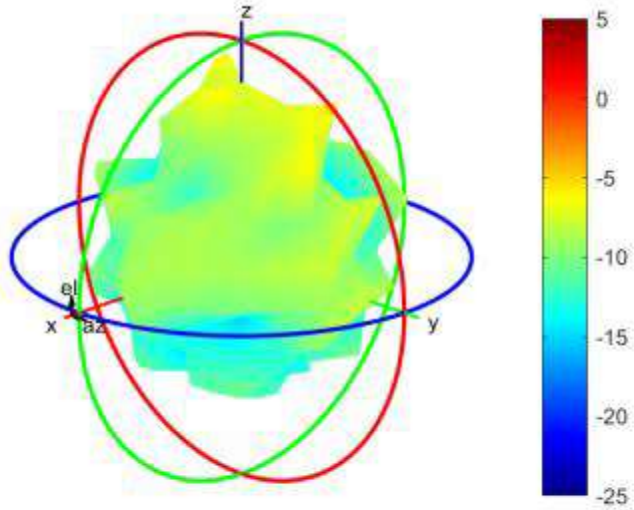
Center Frequency	3500MHz
Horizontal (dBi) peak	-8.51
Vertical (dBi) peak	-10.03

3600MHz



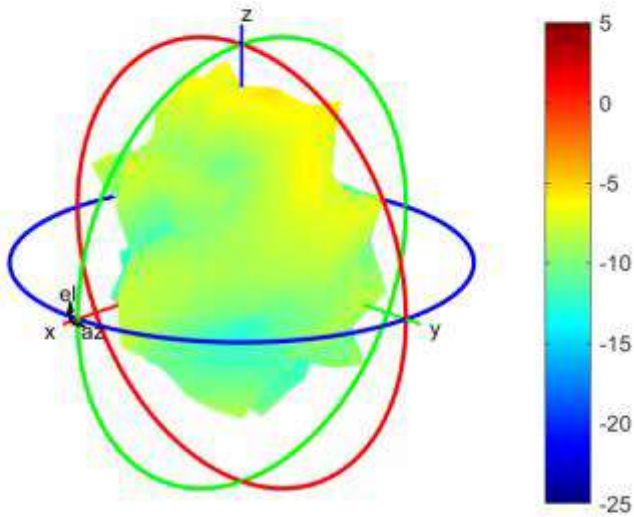
Center Frequency	3600MHz
Horizontal (dBi) peak	-5.61
Vertical (dBi) peak	-6.80

3700MHz



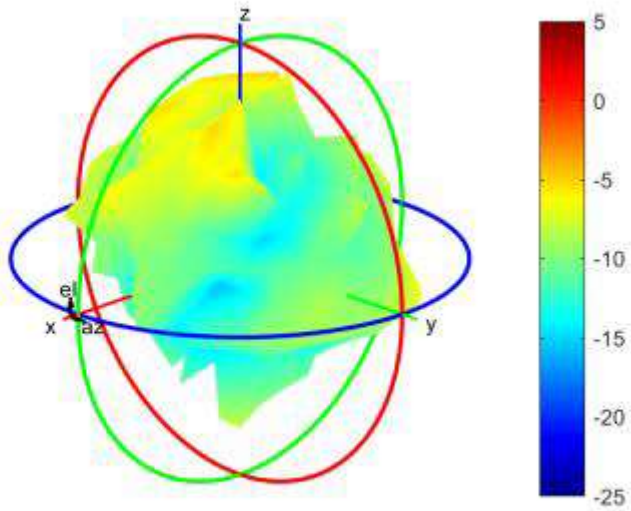
Center Frequency	3700MHz
Horizontal (dBi) peak	-6.18
Vertical (dBi) peak	-5.23

3800MHz



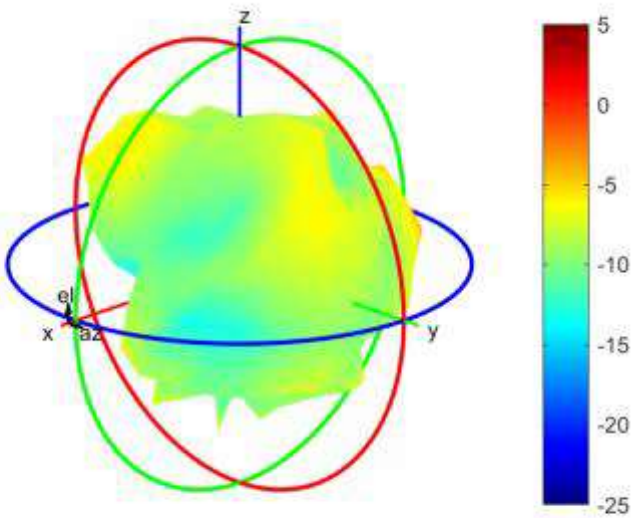
Center Frequency	3800MHz
Horizontal (dBi) peak	-7.21
Vertical (dBi) peak	-6.17

4200MHz



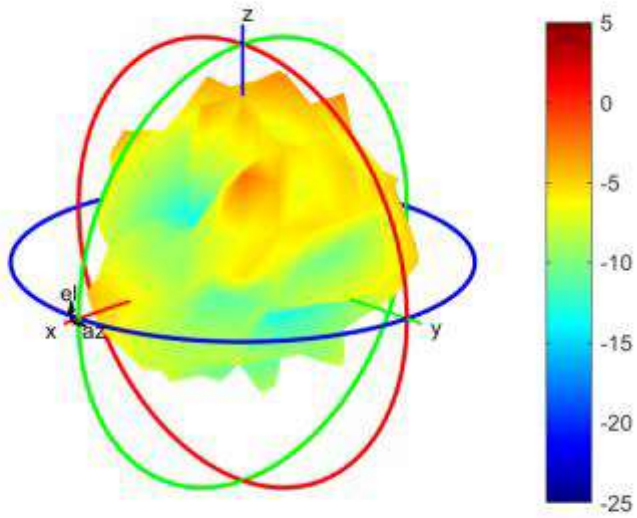
Center Frequency	4200MHz
Horizontal (dBi) peak	-5.48
Vertical (dBi) peak	-6.85

4400MHz



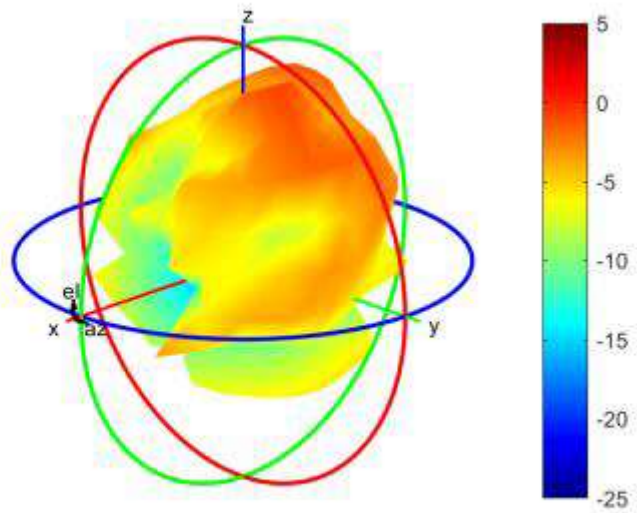
Center Frequency	4400MHz
Horizontal (dBi) peak	-4.17
Vertical (dBi) peak	-5.98

4700MHz



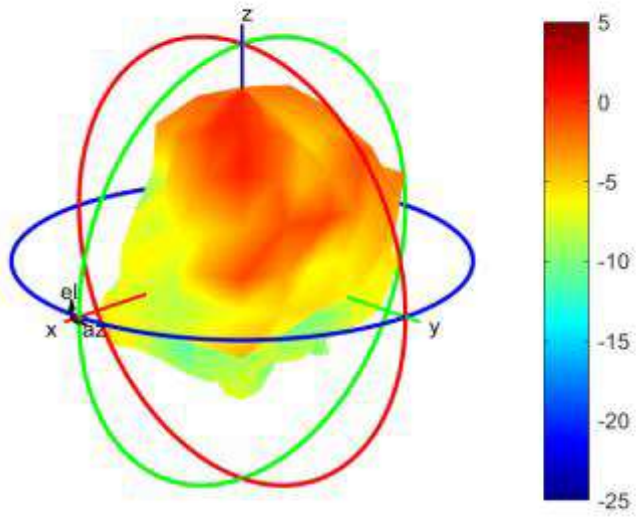
Center Frequency	4700MHz
Horizontal (dBi) peak	-3.53
Vertical (dBi) peak	-3.79

5150MHz



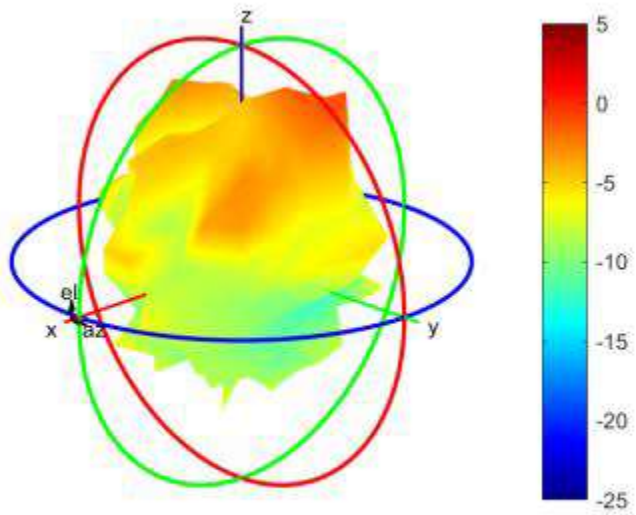
Center Frequency	5150MHz
Horizontal (dBi) peak	-2.76
Vertical (dBi) peak	-2.99

5537.5MHz



Center Frequency	5537.5MHz
Horizontal (dBi) peak	-2.39
Vertical (dBi) peak	-2.76

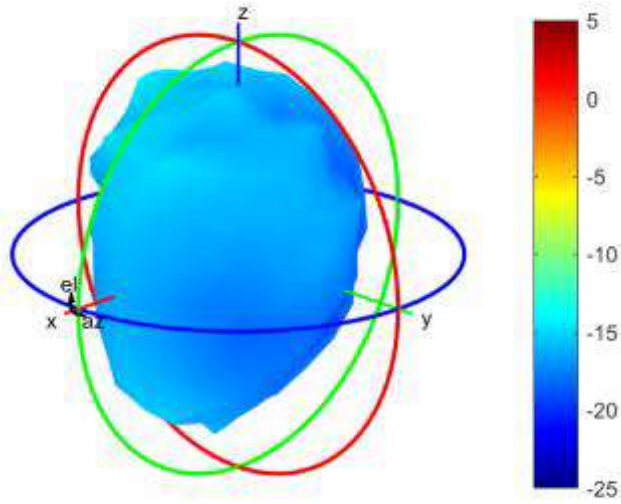
5925MHz



Center Frequency	5925MHz
Horizontal (dBi) peak	-3.19
Vertical (dBi) peak	-3.46

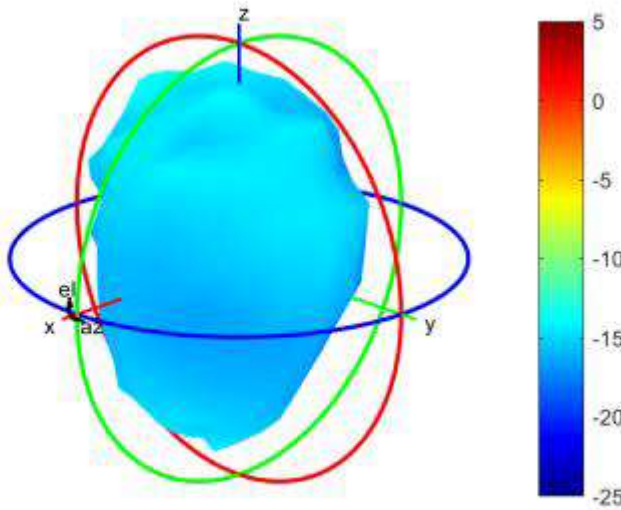
WWAN Aux Antenna (DRx)

617MHz



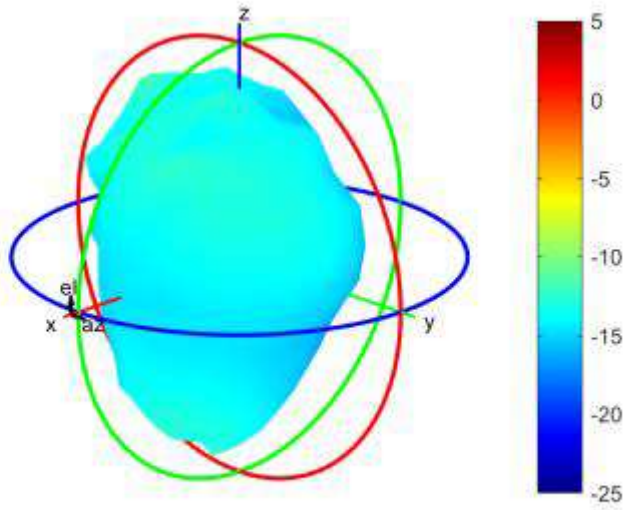
Center Frequency	617MHz
Horizontal (dBi) peak	-15.22
Vertical (dBi) peak	-15.77

634MHz



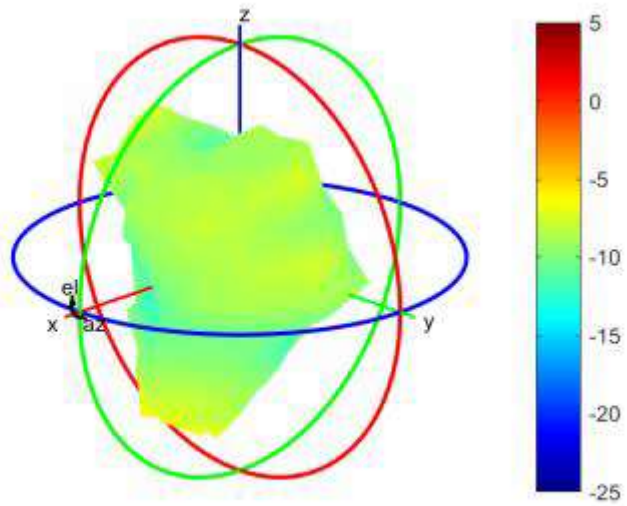
Center Frequency	634MHz
Horizontal (dBi) peak	-14.57
Vertical (dBi) peak	-14.60

652MHz



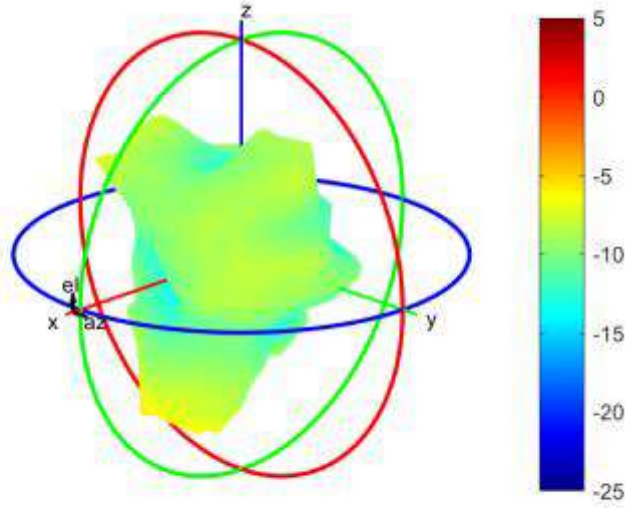
Center Frequency	652MHz
Horizontal (dBi) peak	-13.34
Vertical (dBi) peak	-12.96

717MHz



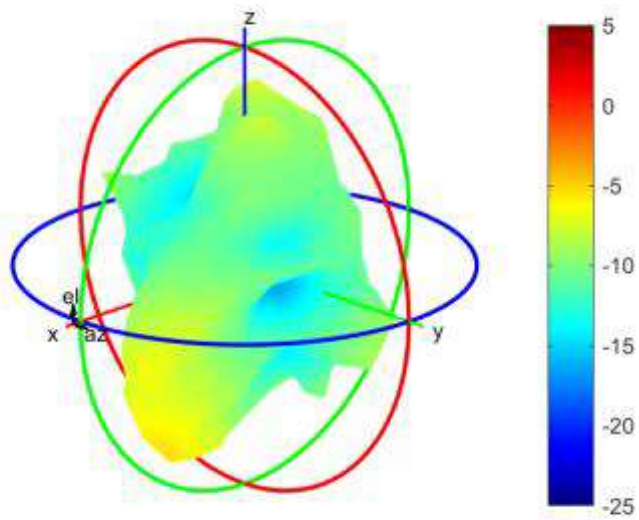
Center Frequency	717MHz
Horizontal (dBi) peak	-7.76
Vertical (dBi) peak	-7.81

725.5MHz



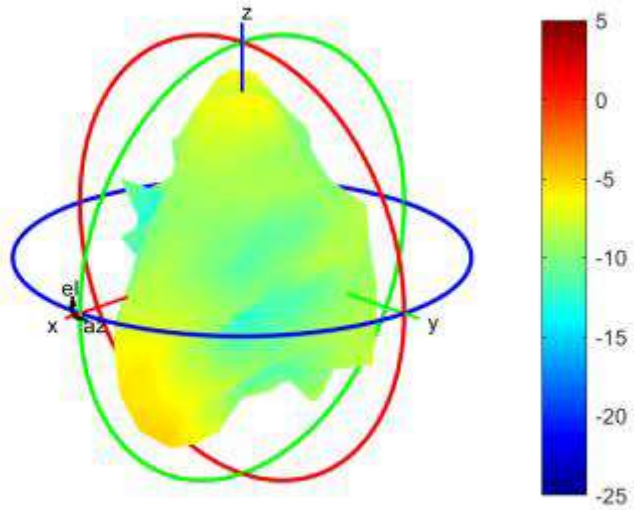
Center Frequency	725.5MHz
Horizontal (dBi) peak	-7.46
Vertical (dBi) peak	-7.29

748MHz



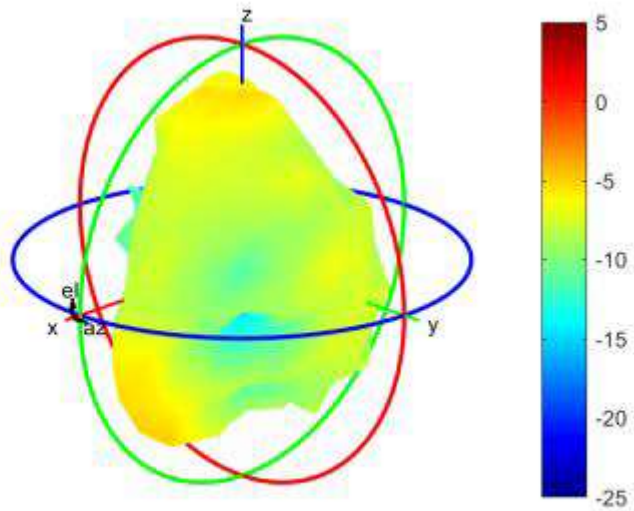
Center Frequency	748MHz
Horizontal (dBi) peak	-9.55
Vertical (dBi) peak	-6.70

756MHz



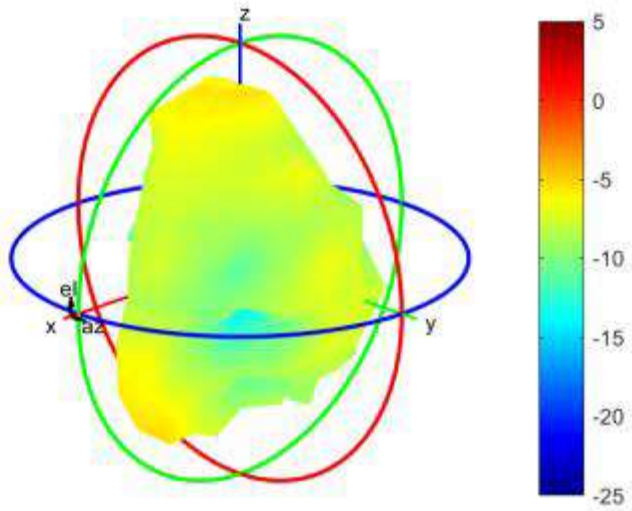
Center Frequency	756MHz
Horizontal (dBi) peak	-6.81
Vertical (dBi) peak	-6.87

768MHz



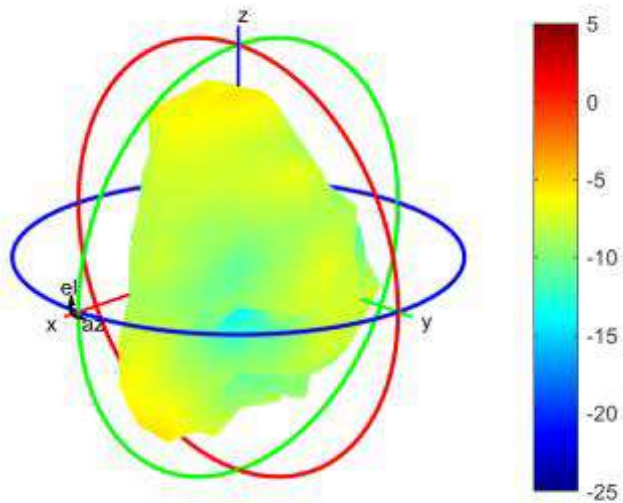
Center Frequency	768MHz
Horizontal (dBi) peak	-6.60
Vertical (dBi) peak	-6.00

777MHz



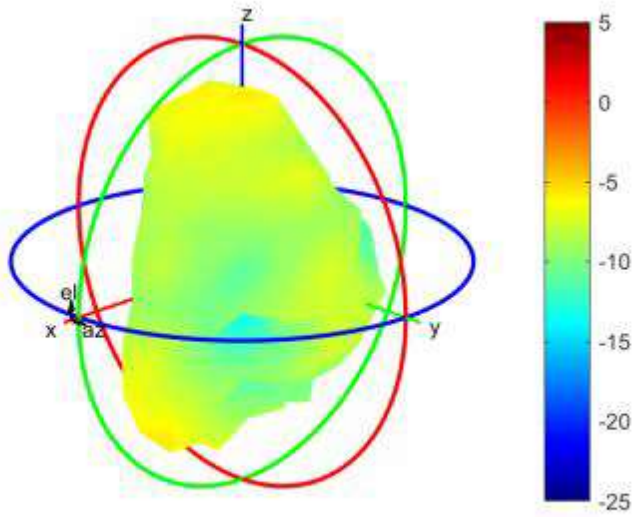
Center Frequency	777MHz
Horizontal (dBi) peak	-5.81
Vertical (dBi) peak	-6.75

782MHz



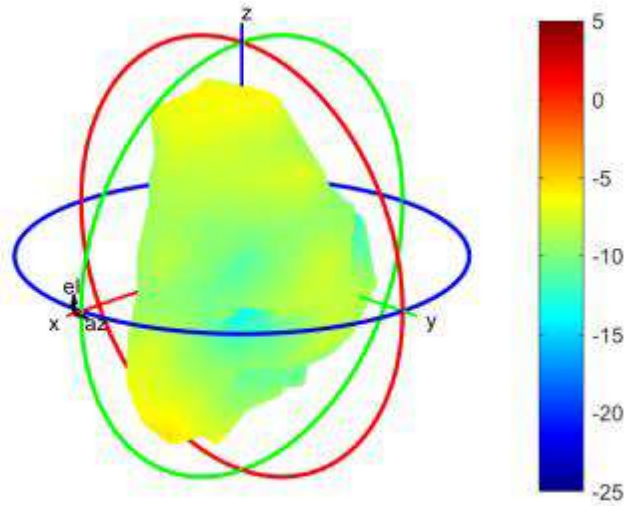
Center Frequency	782MHz
Horizontal (dBi) peak	-6.11
Vertical (dBi) peak	-6.24

787MHz



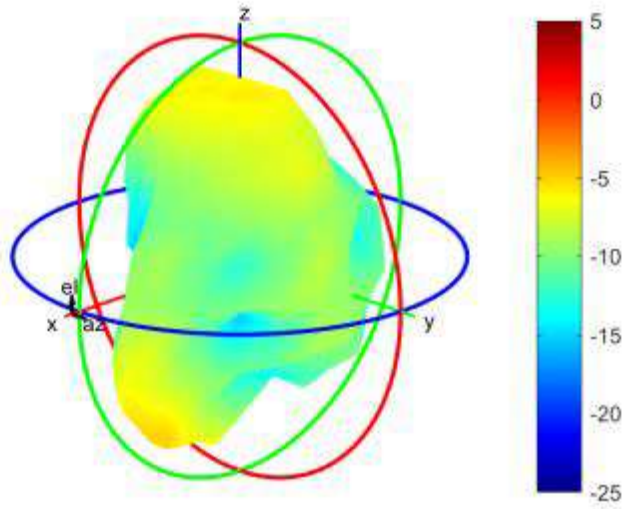
Center Frequency	787MHz
Horizontal (dBi) peak	-6.38
Vertical (dBi) peak	-6.57

791MHz



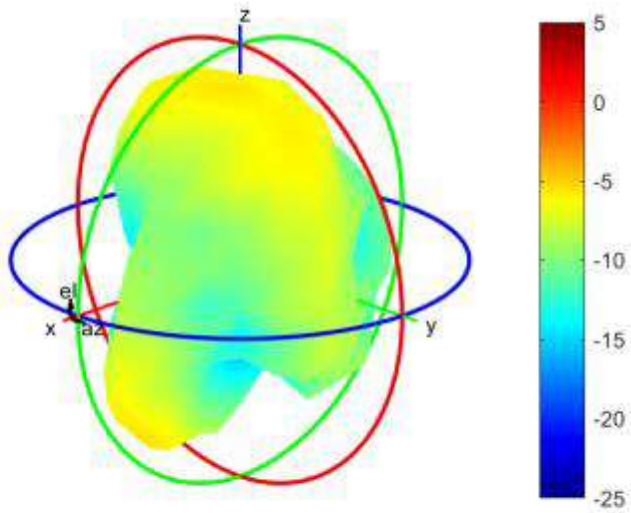
Center Frequency	791MHz
Horizontal (dBi) peak	-6.46
Vertical (dBi) peak	-6.66

806MHz



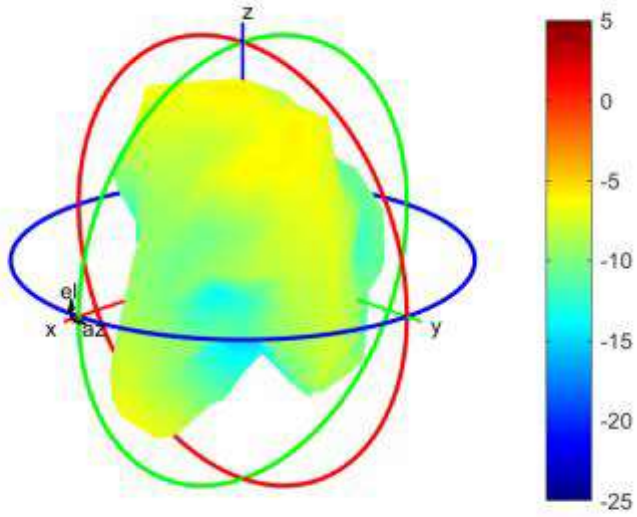
Center Frequency	806MHz
Horizontal (dBi) peak	-6.66
Vertical (dBi) peak	-6.30

814MHz



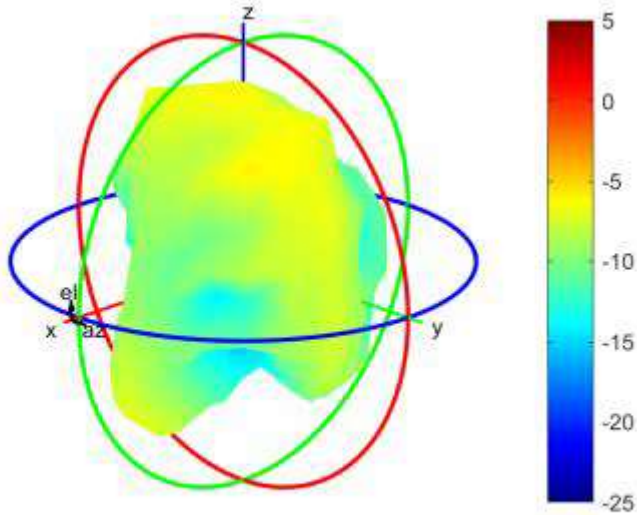
Center Frequency	814MHz
Horizontal (dBi) peak	-6.93
Vertical (dBi) peak	-6.96

821MHz



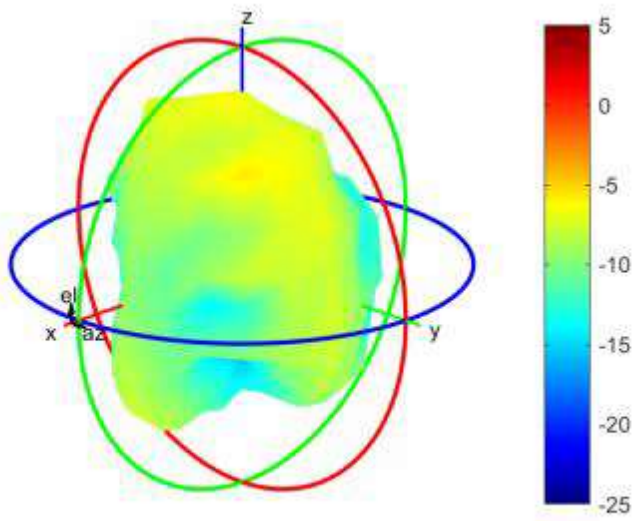
Center Frequency	821MHz
Horizontal (dBi) peak	-7.37
Vertical (dBi) peak	-6.34

824MHz



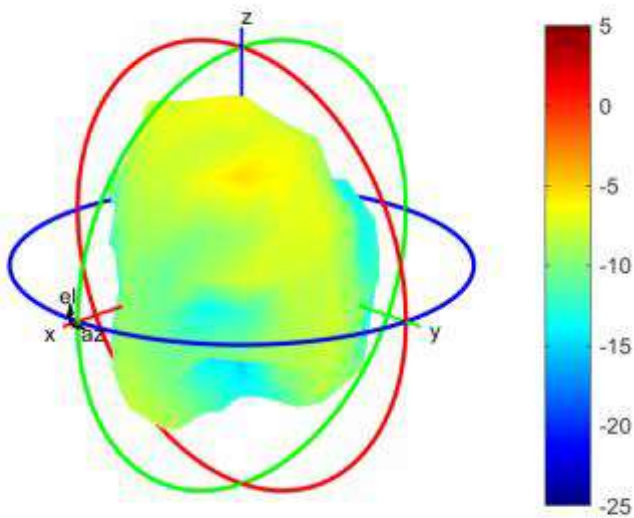
Center Frequency	824MHz
Horizontal (dBi) peak	-7.35
Vertical (dBi) peak	-6.30

832MHz



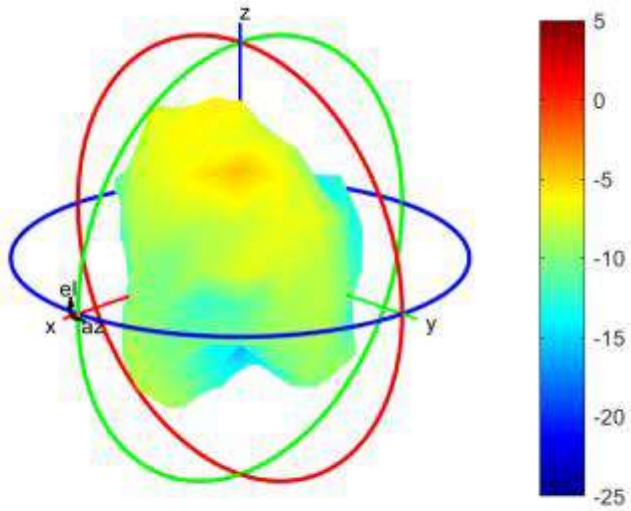
Center Frequency	832MHz
Horizontal (dBi) peak	-7.25
Vertical (dBi) peak	-6.30

836.5MHz



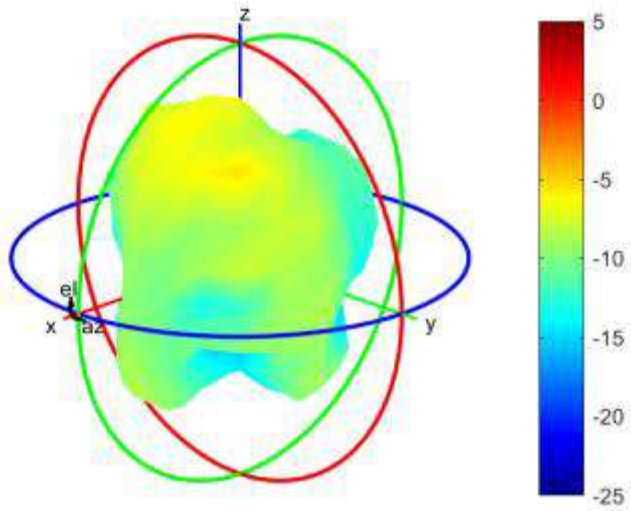
Center Frequency	836.5MHz
Horizontal (dBi) peak	-7.15
Vertical (dBi) peak	-6.19

849MHz



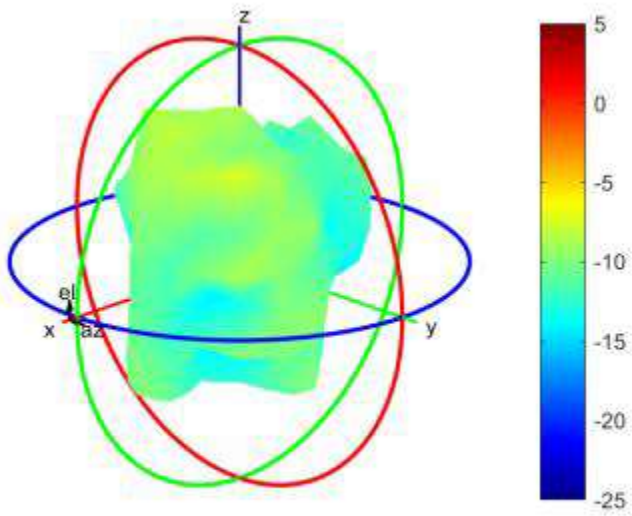
Center Frequency	849MHz
Horizontal (dBi) peak	-6.10
Vertical (dBi) peak	-6.26

862MHz



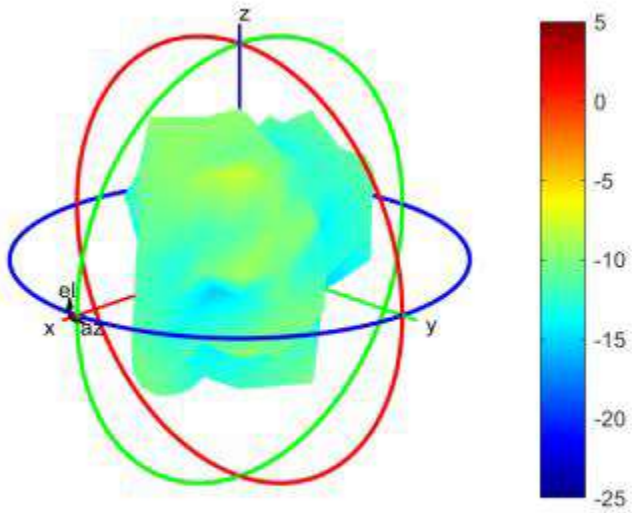
Center Frequency	862MHz
Horizontal (dBi) peak	-6.05
Vertical (dBi) peak	-7.32

880MHz



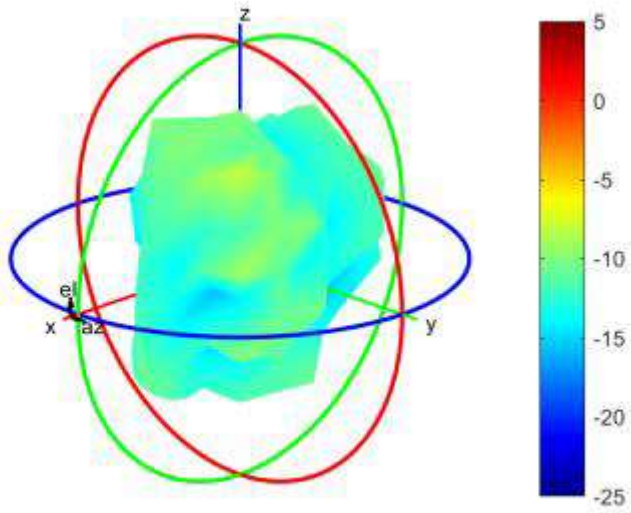
Center Frequency	880MHz
Horizontal (dBi) peak	-8.15
Vertical (dBi) peak	-8.09

897.5MHz



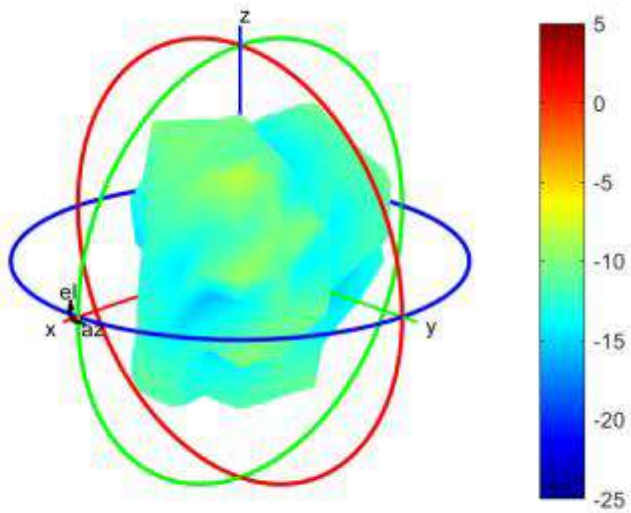
Center Frequency	897.5MHz
Horizontal (dBi) peak	-9.36
Vertical (dBi) peak	-8.51

915MHz



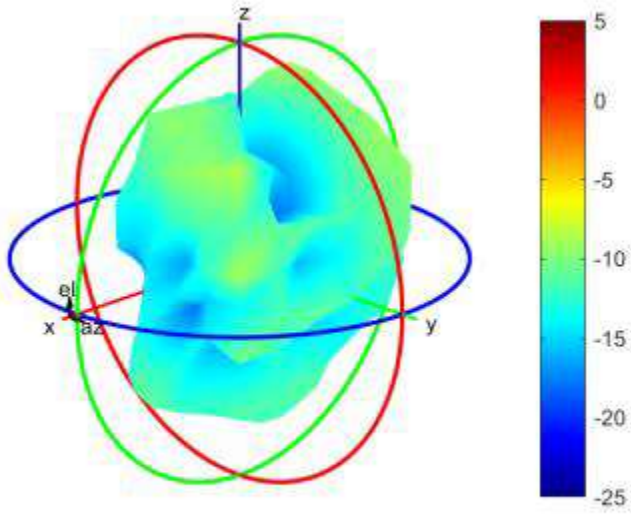
Center Frequency	915MHz
Horizontal (dBi) peak	-9.71
Vertical (dBi) peak	-8.93

925MHz



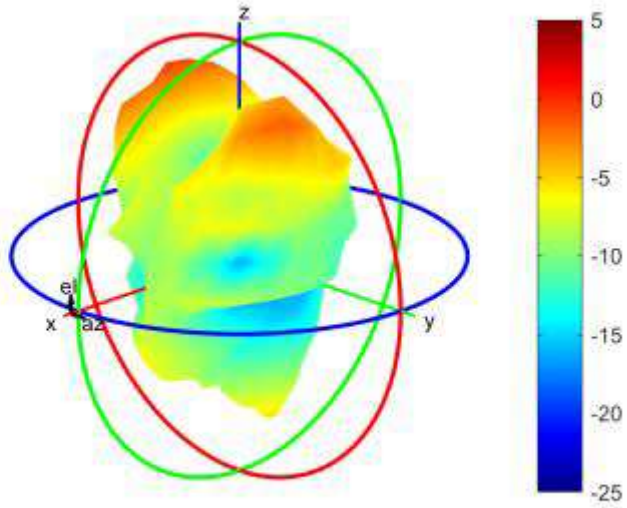
Center Frequency	925MHz
Horizontal (dBi) peak	-9.87
Vertical (dBi) peak	-9.11

960MHz



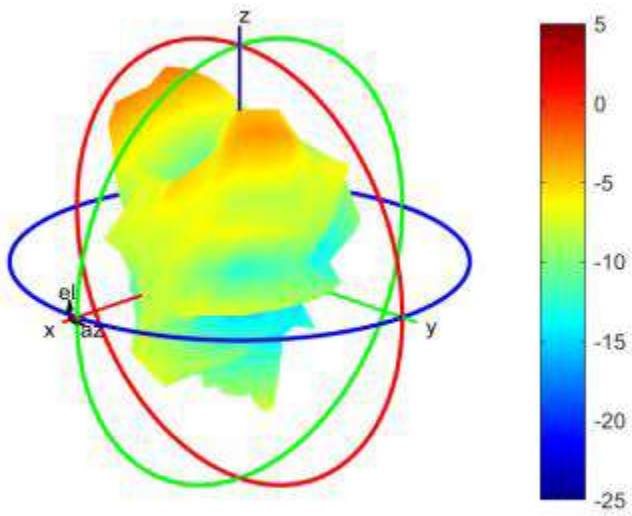
Center Frequency	960MHz
Horizontal (dBi) peak	-10.60
Vertical (dBi) peak	-9.64

1427.9MHz



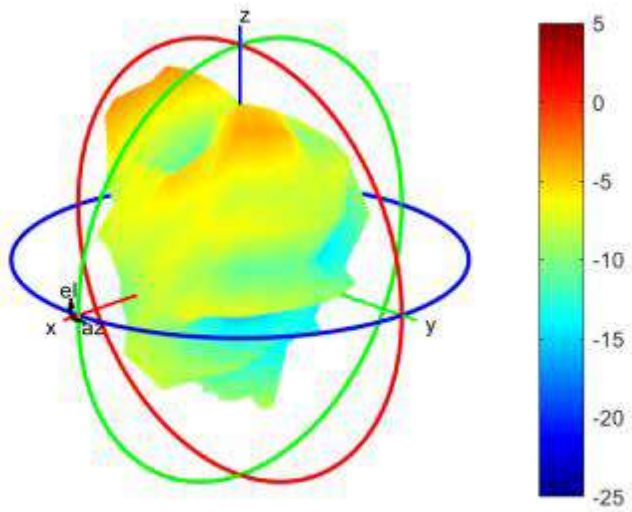
Center Frequency	1427.9MHz
Horizontal (dBi) peak	-0.21
Vertical (dBi) peak	-6.99

1447.9MHz



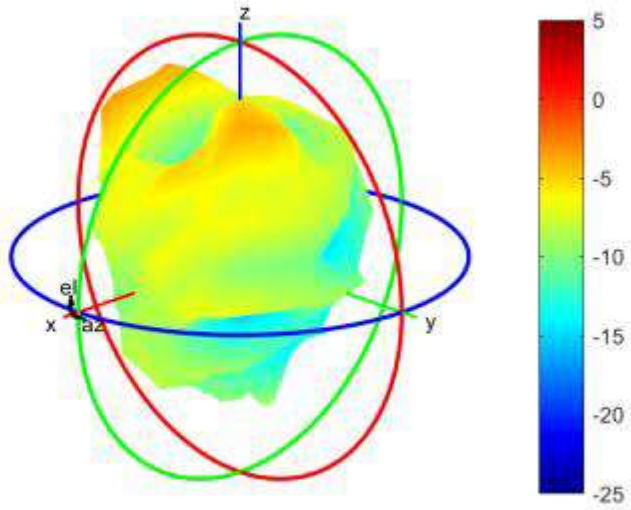
Center Frequency	1447.9MHz
Horizontal (dBi) peak	-1.78
Vertical (dBi) peak	-6.72

1455.4MHz



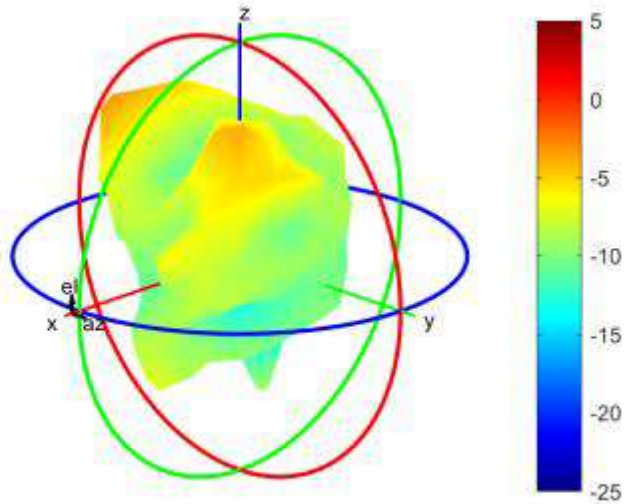
Center Frequency	1455.4MHz
Horizontal (dBi) peak	-2.55
Vertical (dBi) peak	-6.61

1462.9MHz



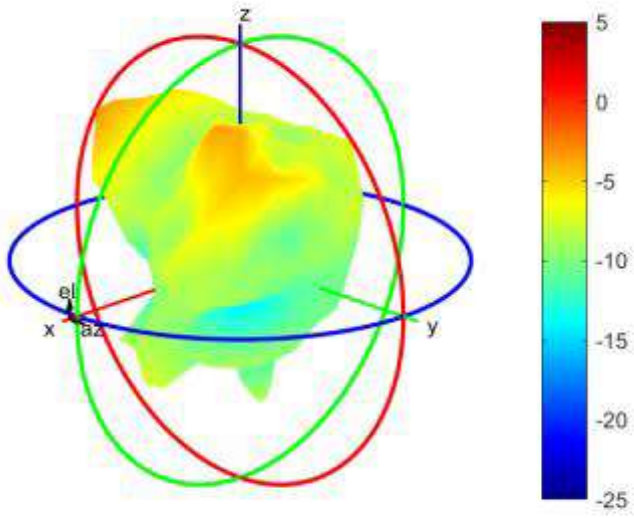
Center Frequency	1462.9MHz
Horizontal (dBi) peak	-3.17
Vertical (dBi) peak	-6.71

1496MHz



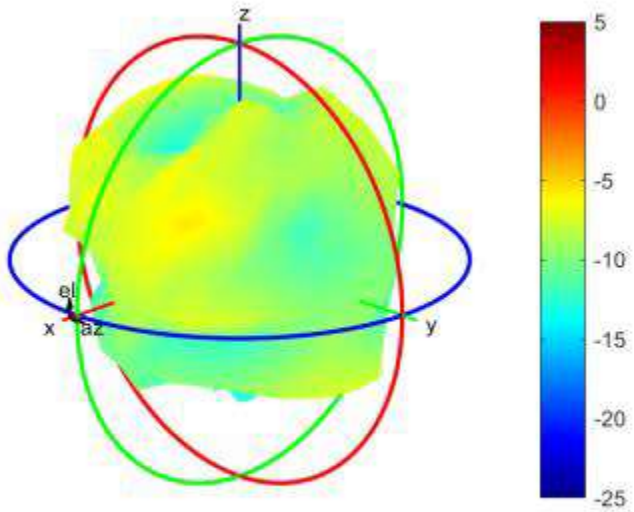
Center Frequency	1496MHz
Horizontal (dBi) peak	-4.10
Vertical (dBi) peak	-6.72

1510.9MHz



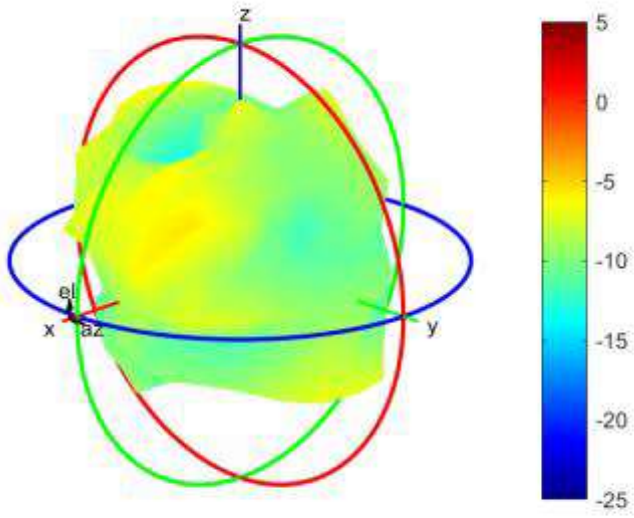
Center Frequency	1510.9MHz
Horizontal (dBi) peak	-4.02
Vertical (dBi) peak	-5.84

1557MHz



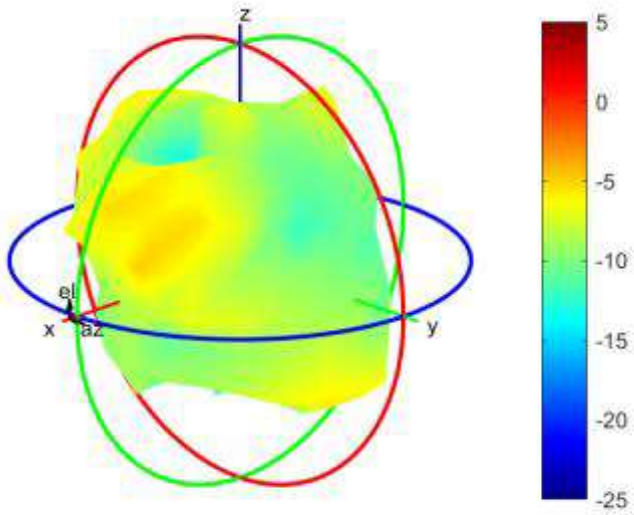
Center Frequency	1557MHz
Horizontal (dBi) peak	-7.57
Vertical (dBi) peak	-8.06

1575MHz



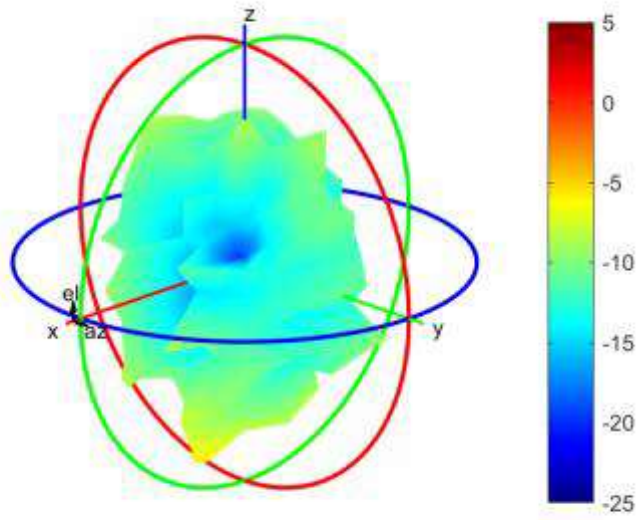
Center Frequency	1575MHz
Horizontal (dBi) peak	-8.07
Vertical (dBi) peak	-8.19

1610MHz



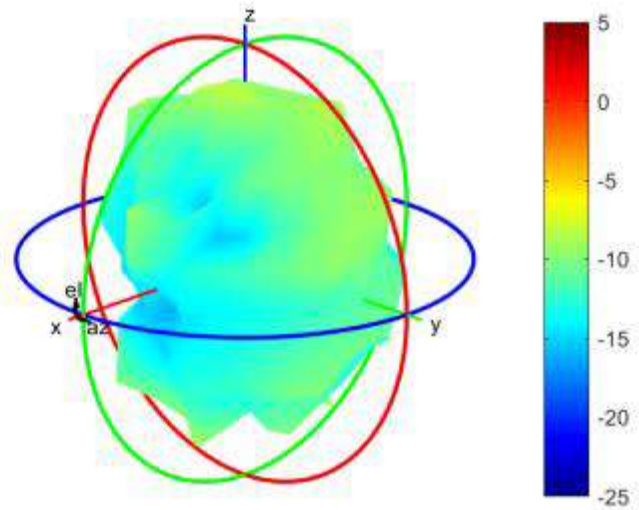
Center Frequency	1610MHz
Horizontal (dBi) peak	-8.78
Vertical (dBi) peak	-8.06

1805 MHz



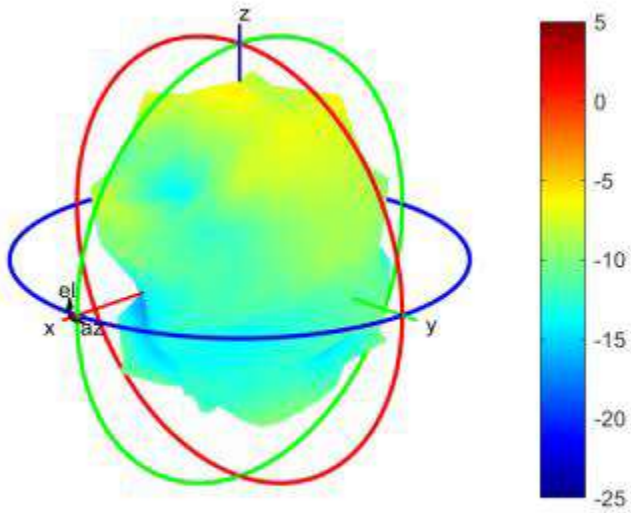
Center Frequency	1805 MHz
Horizontal (dBi) peak	-8.40
Vertical (dBi) peak	-5.78

1850 MHz



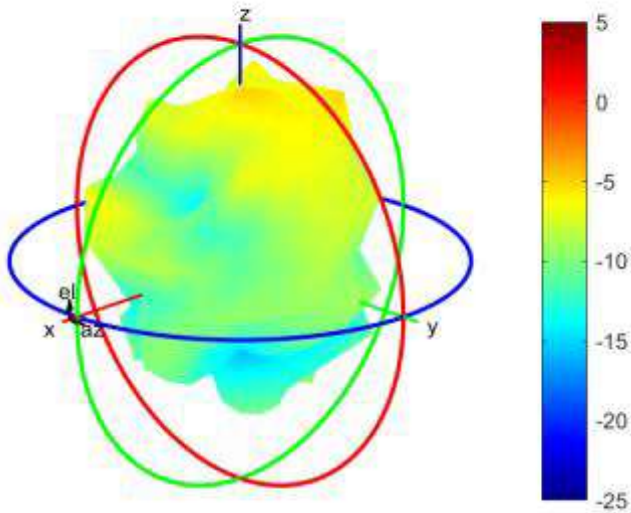
Center Frequency	1850 MHz
Horizontal (dBi) peak	-8.09
Vertical (dBi) peak	-9.06

1880 MHz



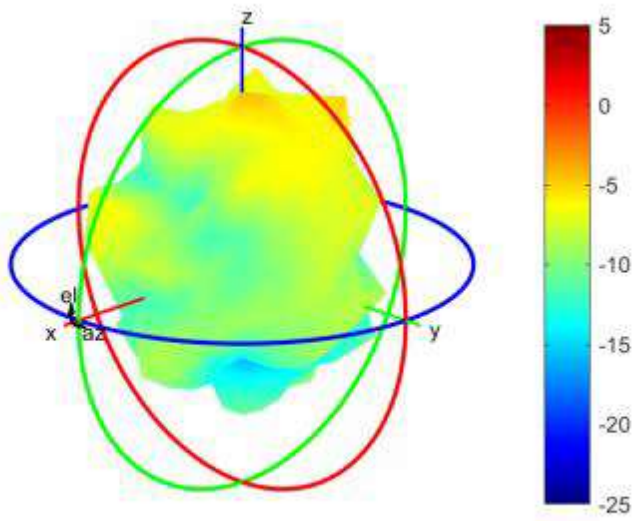
Center Frequency	1880 MHz
Horizontal (dBi) peak	-6.46
Vertical (dBi) peak	-6.66

1910MHz



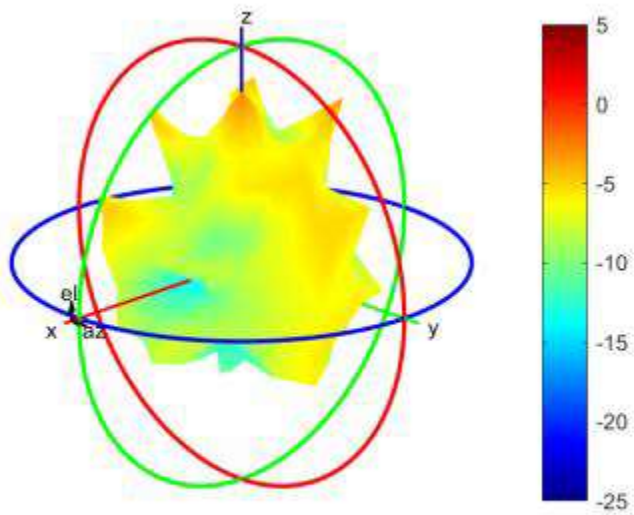
Center Frequency	1910MHz
Horizontal (dBi) peak	-6.29
Vertical (dBi) peak	-6.31

1920MHz



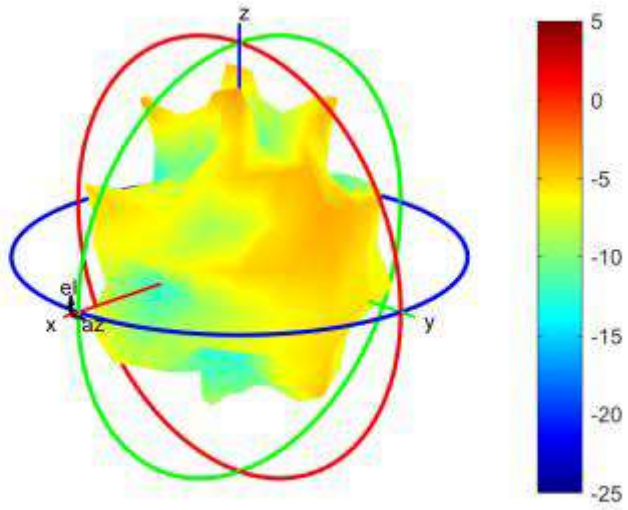
Center Frequency	1920MHz
Horizontal (dBi) peak	-6.20
Vertical (dBi) peak	-6.04

1950MHz



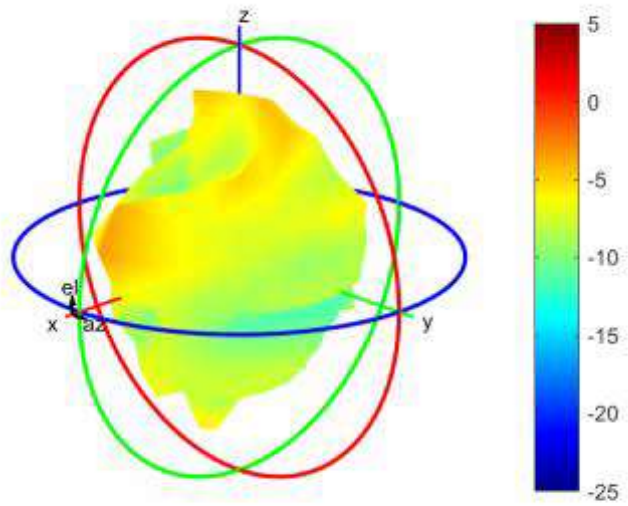
Center Frequency	1950MHz
Horizontal (dBi) peak	-4.83
Vertical (dBi) peak	-5.36

1980MHz



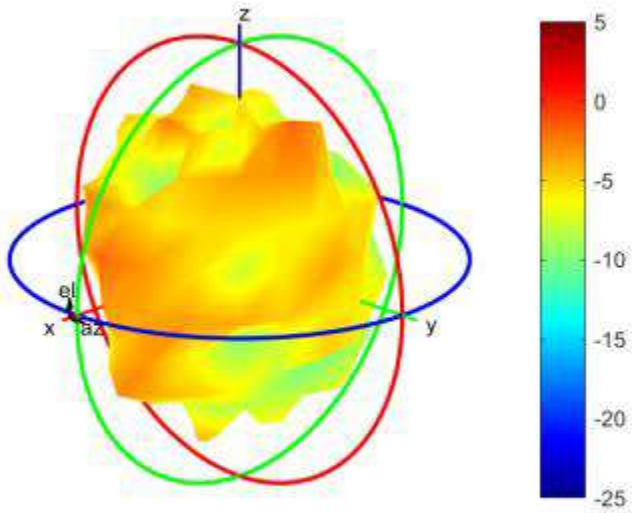
Center Frequency	1980MHz
Horizontal (dBi) peak	-4.89
Vertical (dBi) peak	-5.23

2110MHz



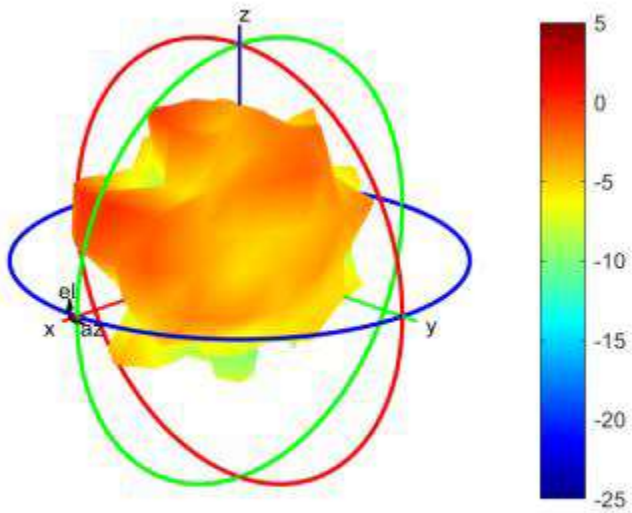
Center Frequency	2110MHz
Horizontal (dBi) peak	-5.45
Vertical (dBi) peak	-5.12

2200MHz



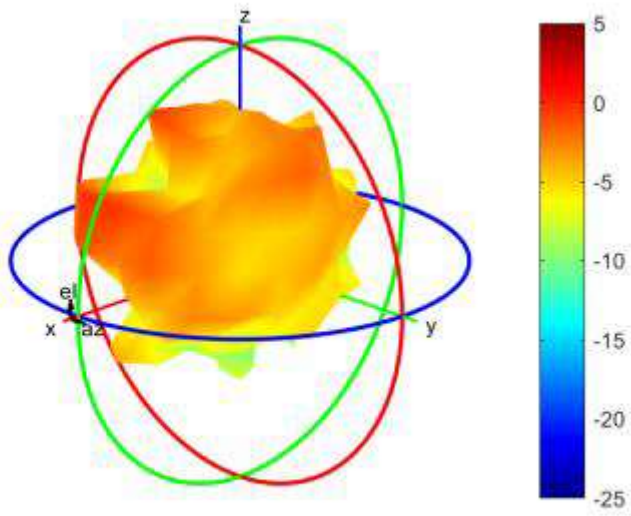
Center Frequency	2200MHz
Horizontal (dBi) peak	-4.61
Vertical (dBi) peak	-5.07

2300MHz



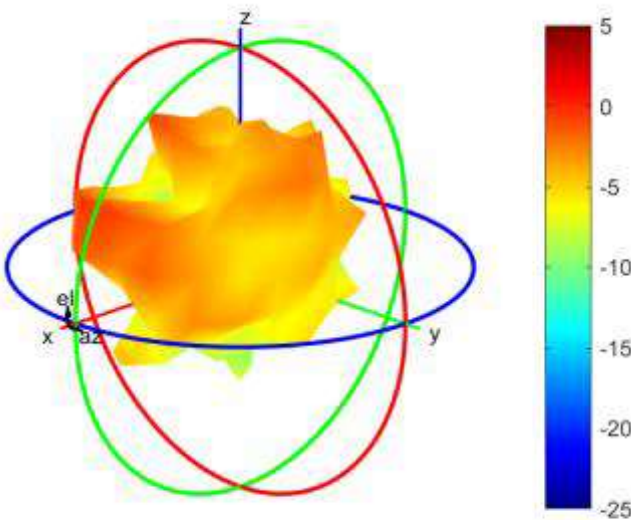
Center Frequency	2300MHz
Horizontal (dBi) peak	-0.42
Vertical (dBi) peak	-1.79

2305MHz



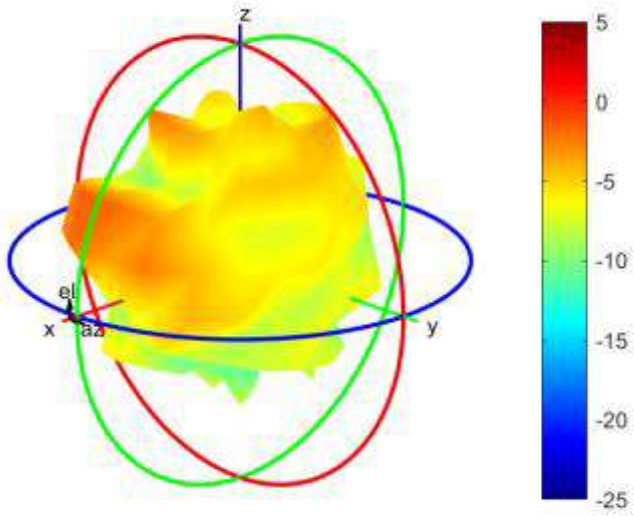
Center Frequency	2305MHz
Horizontal (dBi) peak	-0.53
Vertical (dBi) peak	-1.93

2315MHz



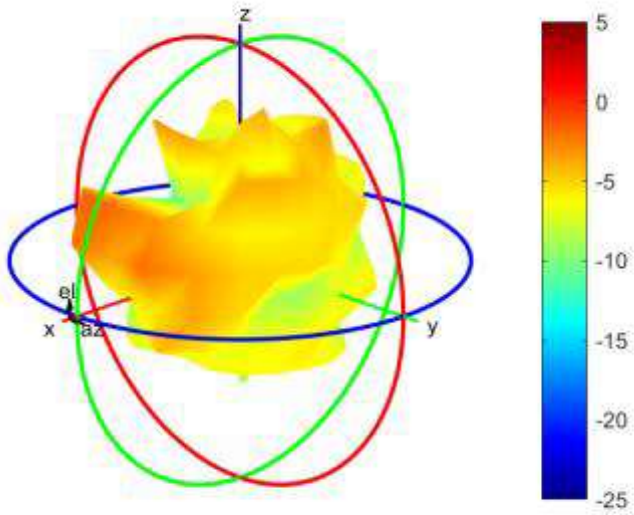
Center Frequency	2315MHz
Horizontal (dBi) peak	-0.79
Vertical (dBi) peak	-2.03

2350MHz



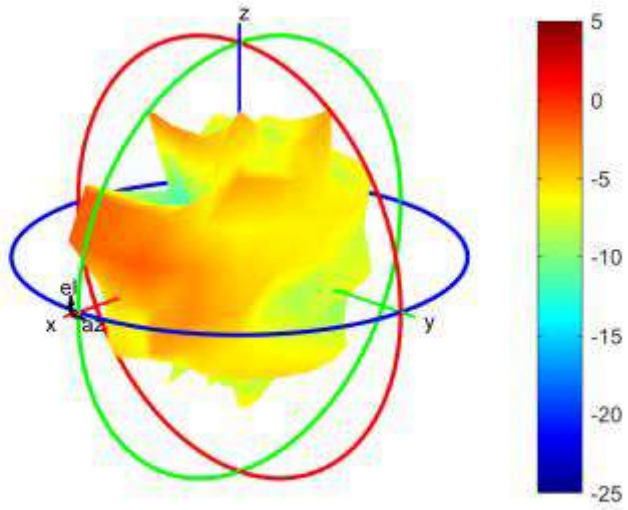
Center Frequency	2350MHz
Horizontal (dBi) peak	-1.85
Vertical (dBi) peak	-3.28

2400MHz



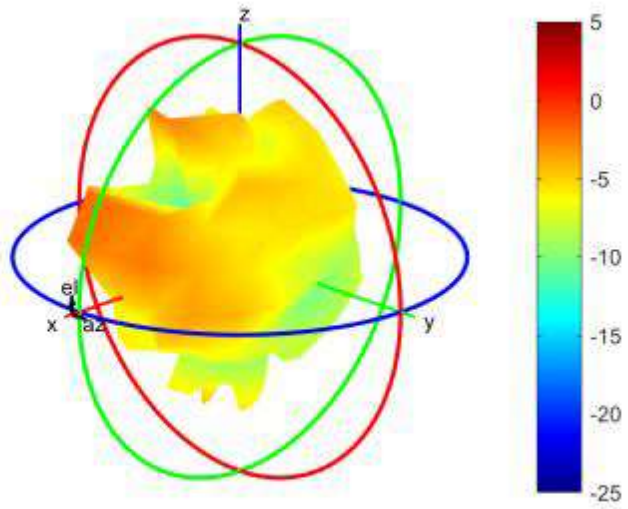
Center Frequency	2400MHz
Horizontal (dBi) peak	-1.70
Vertical (dBi) peak	-3.23

2500MHz



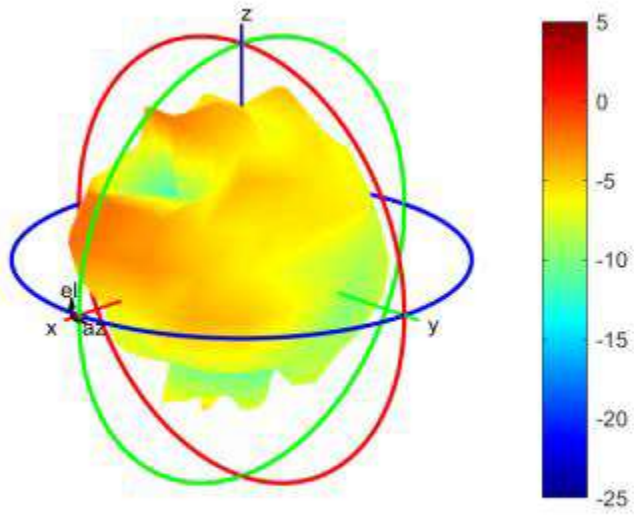
Center Frequency	2500MHz
Horizontal (dBi) peak	-1.33
Vertical (dBi) peak	-3.76

2570MHz



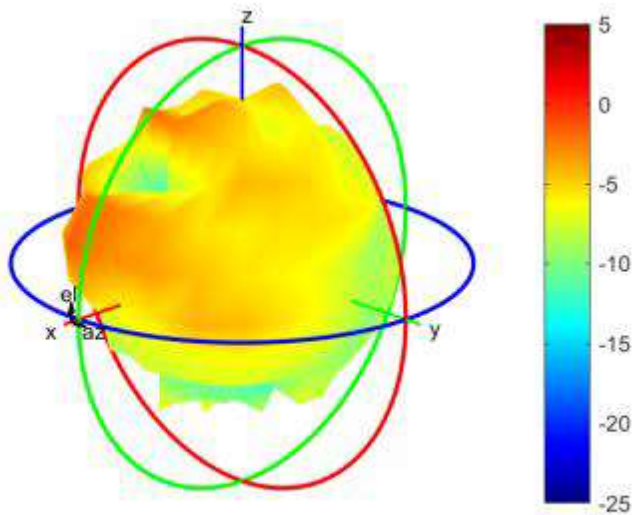
Center Frequency	2570MHz
Horizontal (dBi) peak	-1.98
Vertical (dBi) peak	-4.08

2595MHz



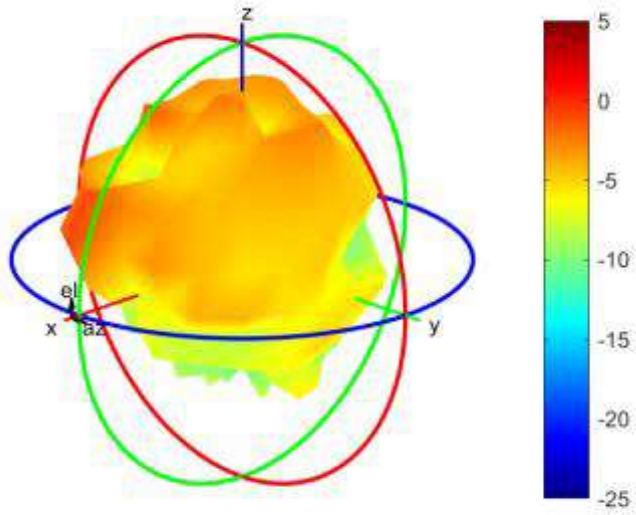
Center Frequency	2595MHz
Horizontal (dBi) peak	-1.86
Vertical (dBi) peak	-4.42

2620MHz



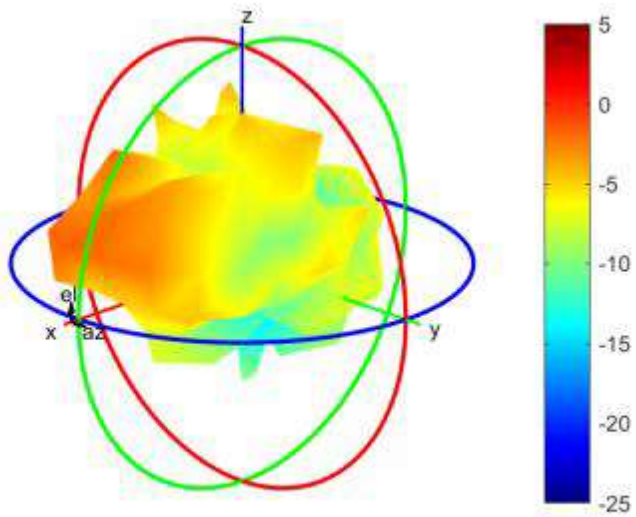
Center Frequency	2620MHz
Horizontal (dBi) peak	-1.77
Vertical (dBi) peak	-4.46

2690MHz



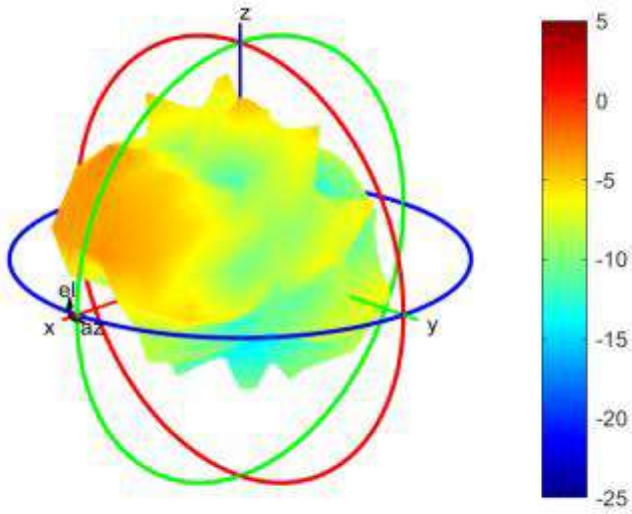
Center Frequency	2690MHz
Horizontal (dBi) peak	-1.01
Vertical (dBi) peak	-3.01

3400MHz



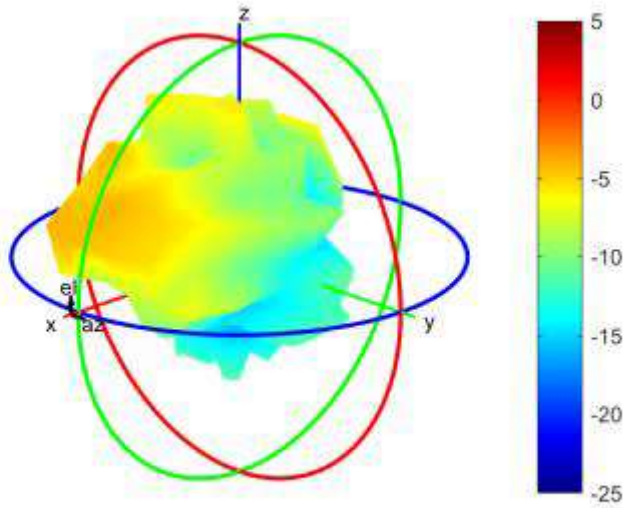
Center Frequency	3400MHz
Horizontal (dBi) peak	-3.16
Vertical (dBi) peak	-4.14

3500MHz



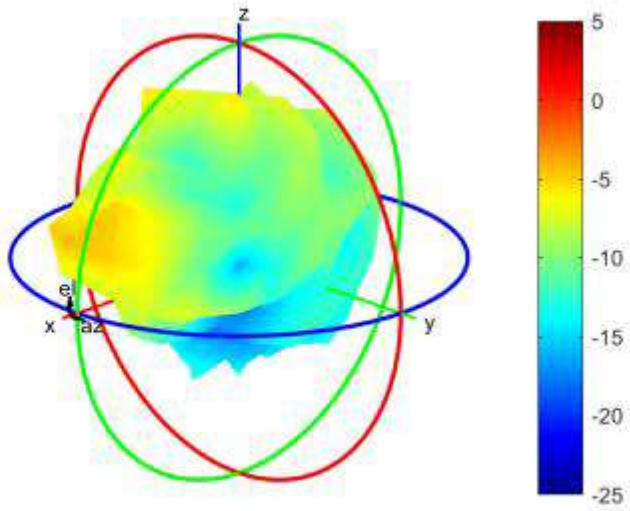
Center Frequency	3500MHz
Horizontal (dBi) peak	-2.90
Vertical (dBi) peak	-4.31

3600MHz



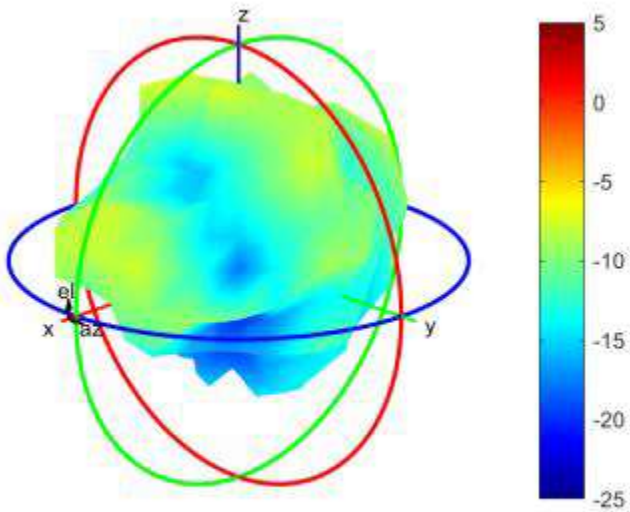
Center Frequency	3600MHz
Horizontal (dBi) peak	-3.33
Vertical (dBi) peak	-5.39

3700MHz



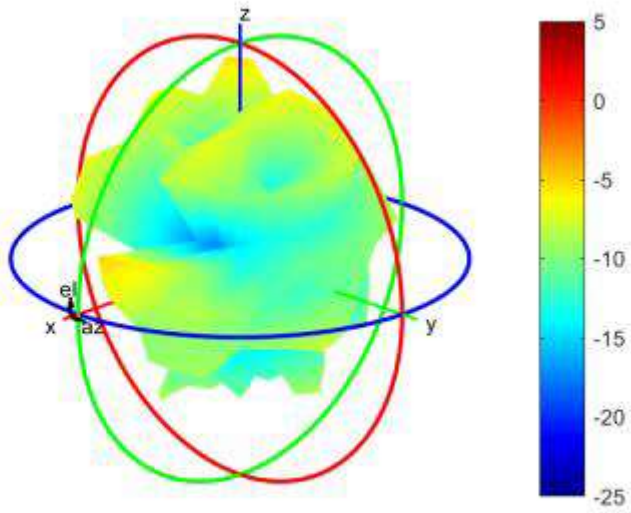
Center Frequency	3700MHz
Horizontal (dBi) peak	-4.16
Vertical (dBi) peak	-5.87

3800MHz



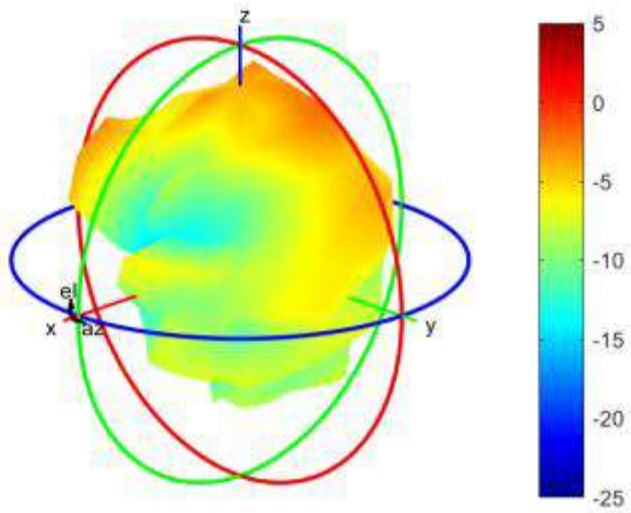
Center Frequency	3800MHz
Horizontal (dBi) peak	-7.43
Vertical (dBi) peak	-7.35

4200MHz



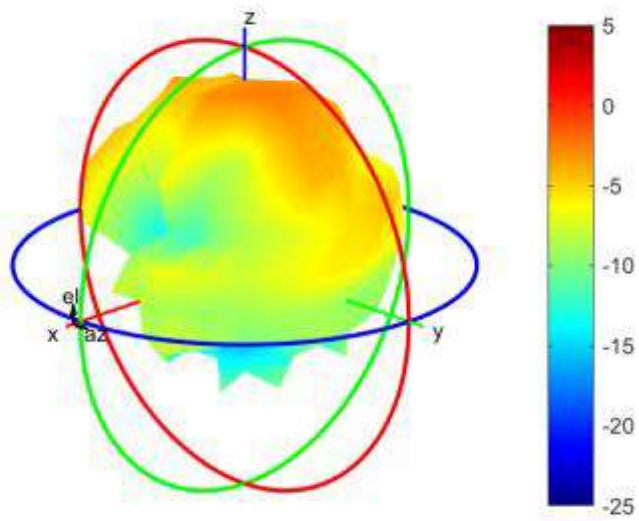
Center Frequency	4200MHz
Horizontal (dBi) peak	-5.02
Vertical (dBi) peak	-6.66

4400MHz



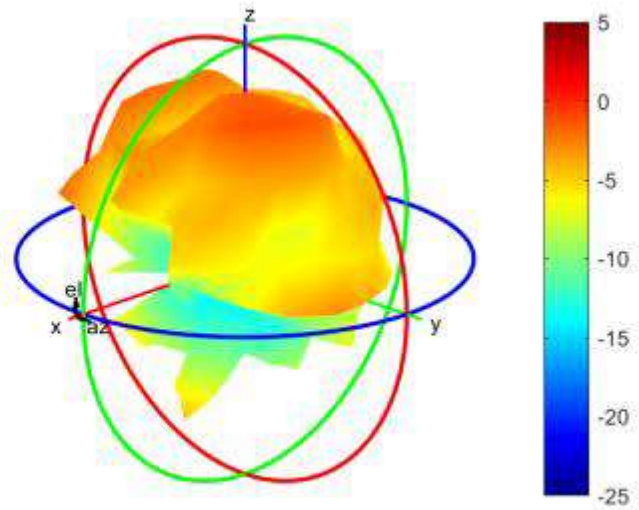
Center Frequency	4400MHz
Horizontal (dBi) peak	-2.58
Vertical (dBi) peak	-3.04

4700MHz



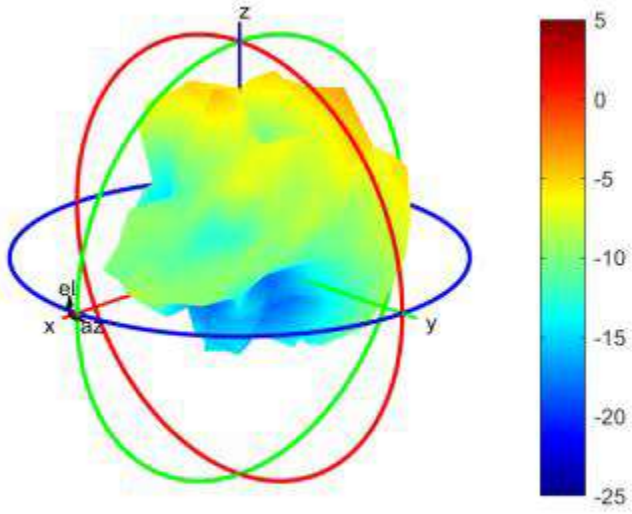
Center Frequency	4700MHz
Horizontal (dBi) peak	-4.78
Vertical (dBi) peak	-2.92

5150MHz



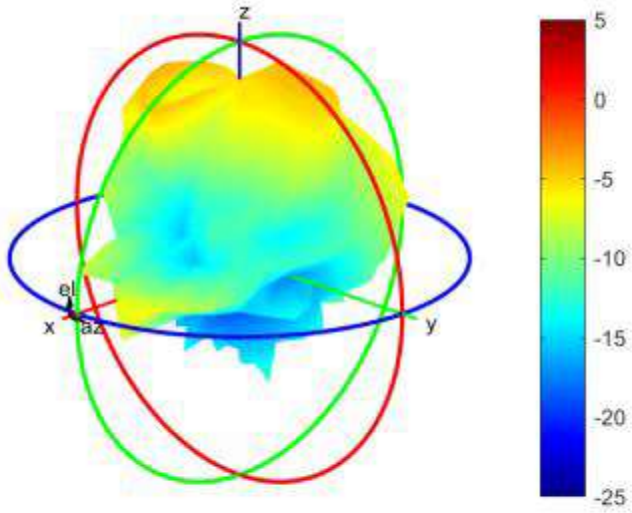
Center Frequency	5150MHz
Horizontal (dBi) peak	-0.91
Vertical (dBi) peak	-1.17

5537.5MHz



Center Frequency	5537.5MHz
Horizontal (dBi) peak	-5.69
Vertical (dBi) peak	-5.03

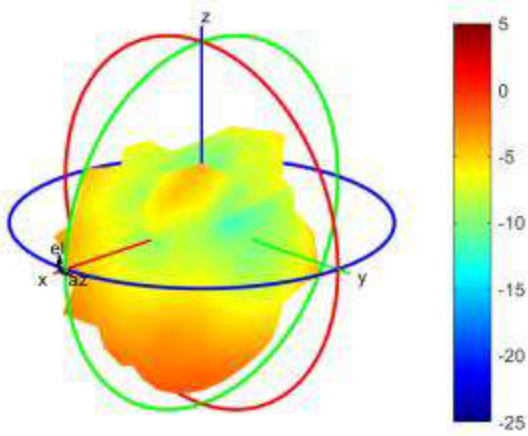
5925MHz



Center Frequency	5925MHz
Horizontal (dBi) peak	-4.76
Vertical (dBi) peak	-5.06

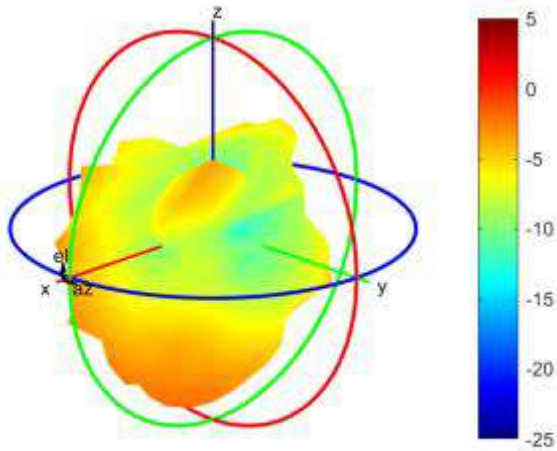
MIMO2 Antenna (DRx2)

1452 MHz



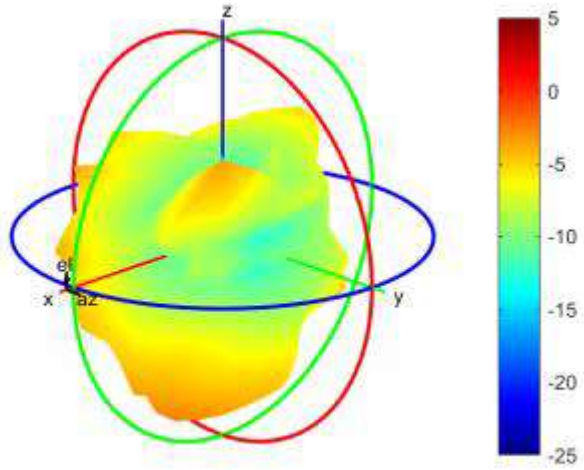
Center Frequency	1452 MHz
Horizontal (dBi) peak	-3.27
Vertical (dBi) peak	-3.38

1474 MHz



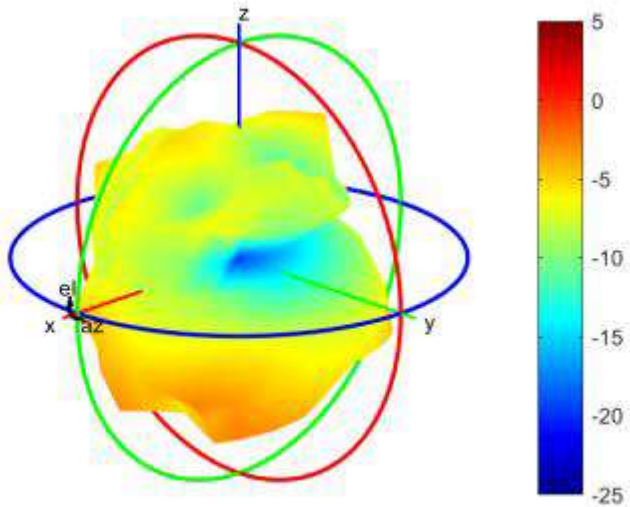
Center Frequency	1474 MHz
Horizontal (dBi) peak	-3.00
Vertical (dBi) peak	-3.60

1496 MHz



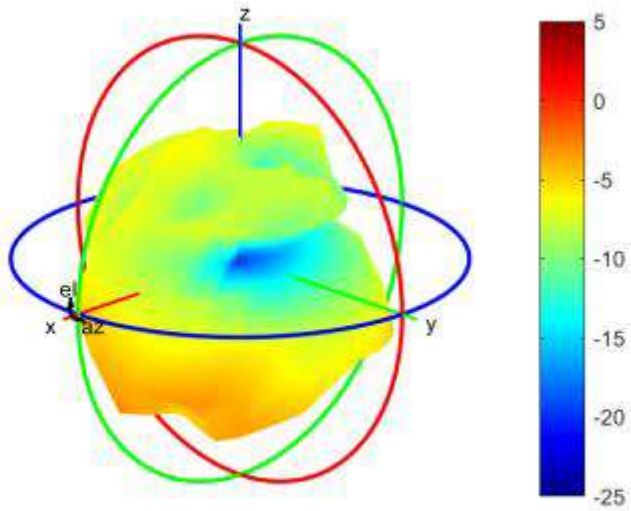
Center Frequency	1496 MHz
Horizontal (dBi) peak	-2.58
Vertical (dBi) peak	-3.46

1710 MHz



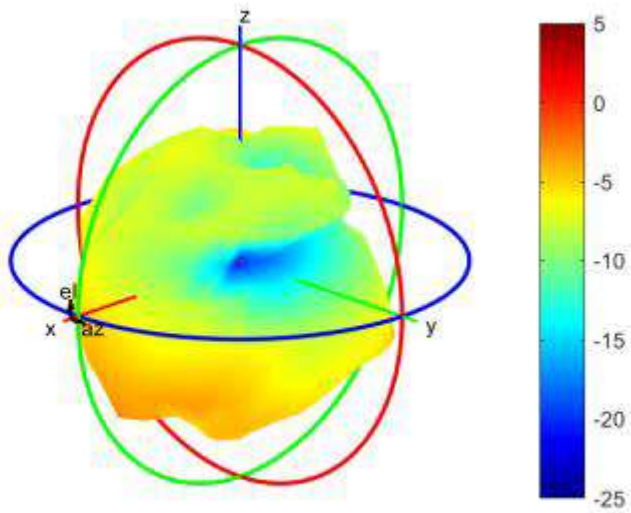
Center Frequency	1710 MHz
Horizontal (dBi) peak	-3.37
Vertical (dBi) peak	-3.55

1732.5 MHz



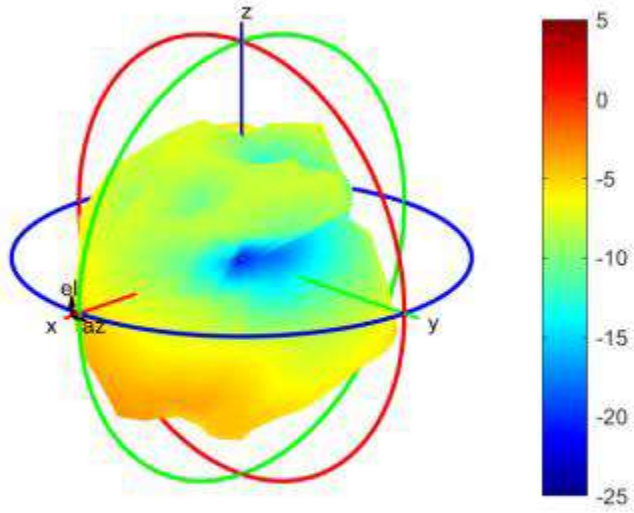
Center Frequency	1732.5 MHz
Horizontal (dBi) peak	-3.67
Vertical (dBi) peak	-4.30

1747.5 MHz



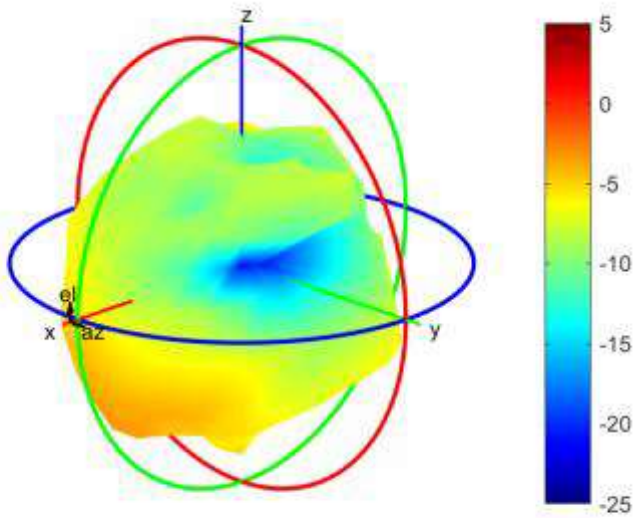
Center Frequency	1747.5 MHz
Horizontal (dBi) peak	-3.73
Vertical (dBi) peak	-4.26

1755 MHz



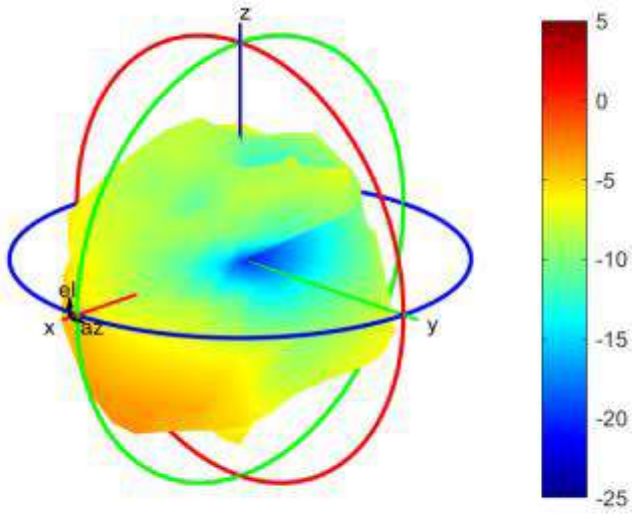
Center Frequency	1755 MHz
Horizontal (dBi) peak	-2.97
Vertical (dBi) peak	-4.42

1785 MHz



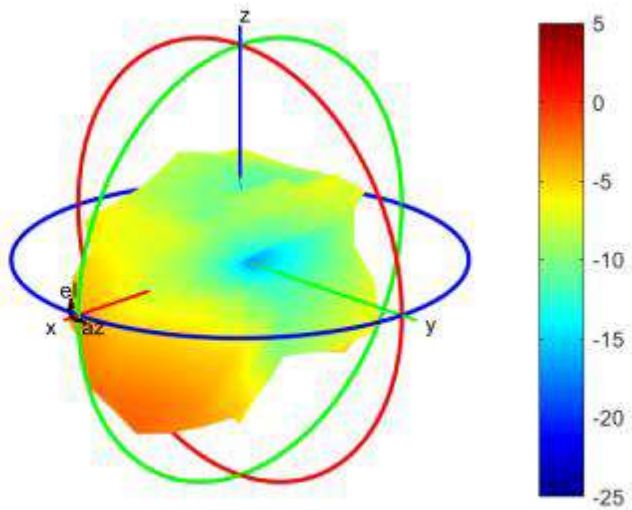
Center Frequency	1785 MHz
Horizontal (dBi) peak	-3.64
Vertical (dBi) peak	-5.39

1805 MHz



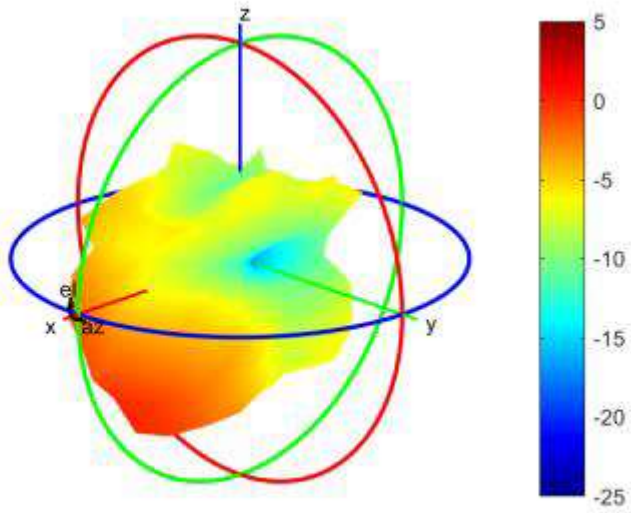
Center Frequency	1805 MHz
Horizontal (dBi) peak	-2.58
Vertical (dBi) peak	-5.55

1850 MHz



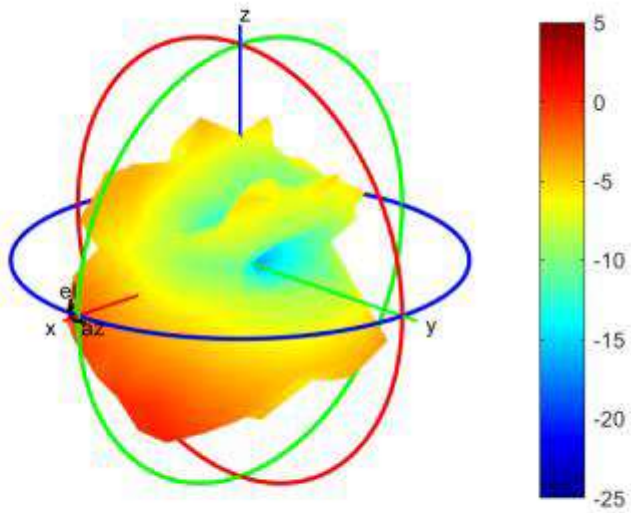
Center Frequency	1850 MHz
Horizontal (dBi) peak	-3.40
Vertical (dBi) peak	-4.41

1880 MHz



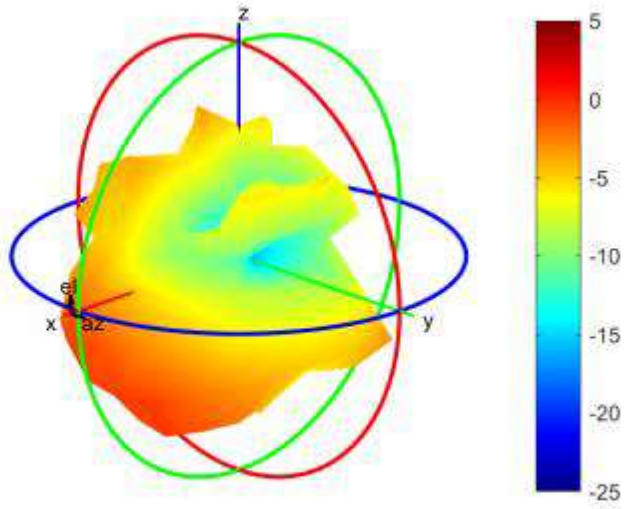
Center Frequency	1880 MHz
Horizontal (dBi) peak	-3.37
Vertical (dBi) peak	-3.28

1910MHz



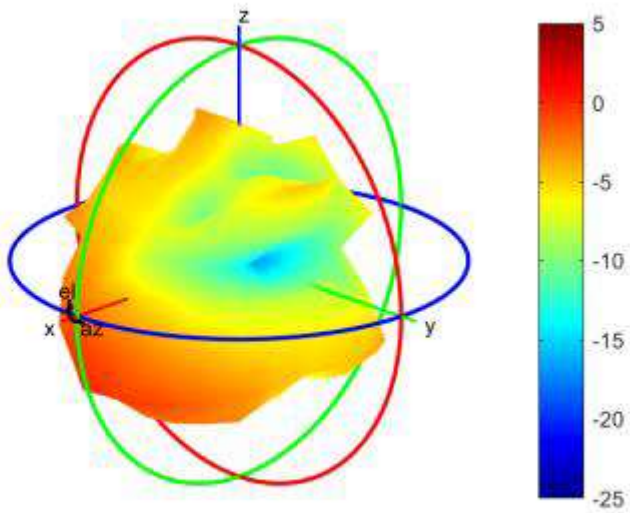
Center Frequency	1910MHz
Horizontal (dBi) peak	-3.39
Vertical (dBi) peak	-3.28

1920MHz



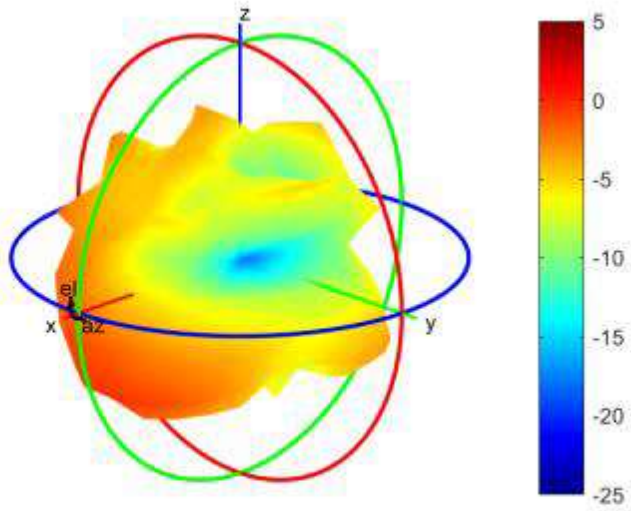
Center Frequency	1920MHz
Horizontal (dBi) peak	-3.40
Vertical (dBi) peak	-2.96

1950MHz



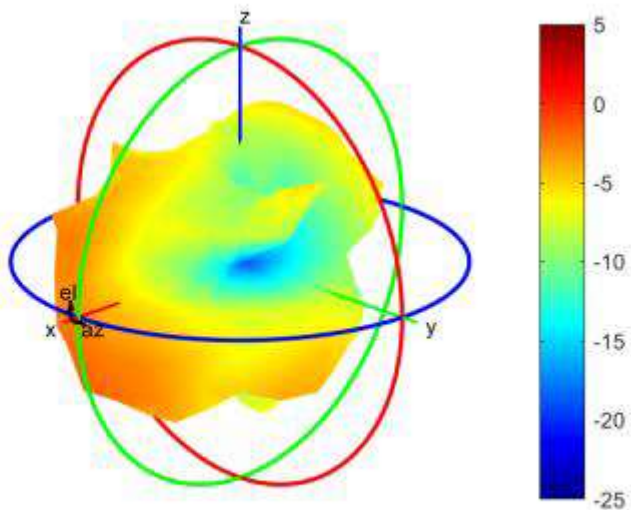
Center Frequency	1950MHz
Horizontal (dBi) peak	-3.45
Vertical (dBi) peak	-2.82

1980MHz



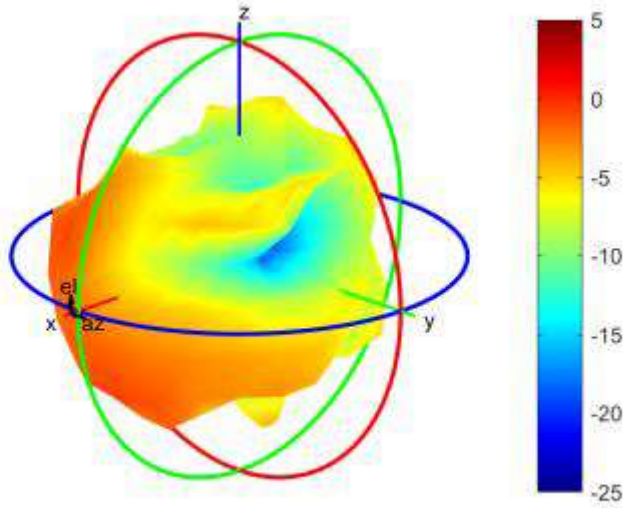
Center Frequency	1980MHz
Horizontal (dBi) peak	-3.17
Vertical (dBi) peak	-2.23

2110MHz



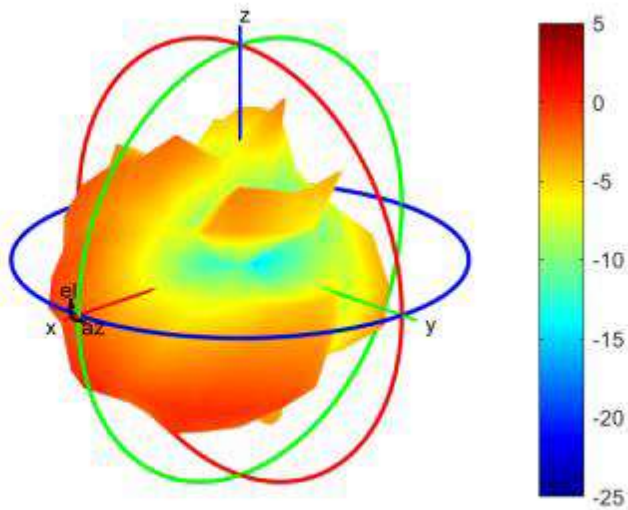
Center Frequency	2110MHz
Horizontal (dBi) peak	-2.86
Vertical (dBi) peak	-2.69

2200MHz



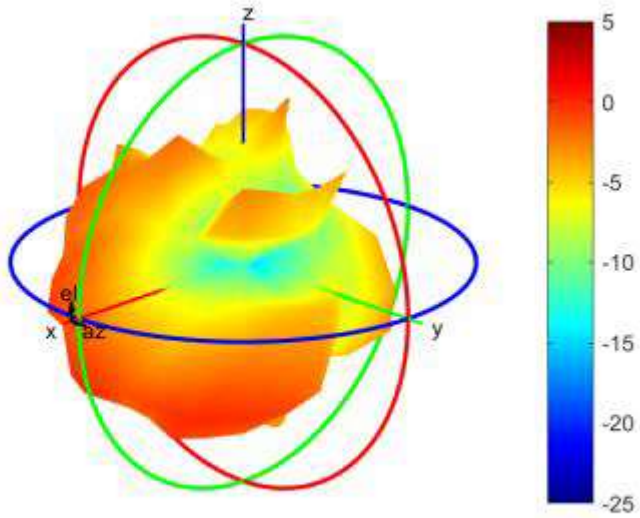
Center Frequency	2200MHz
Horizontal (dBi) peak	-3.26
Vertical (dBi) peak	-3.03

2300MHz



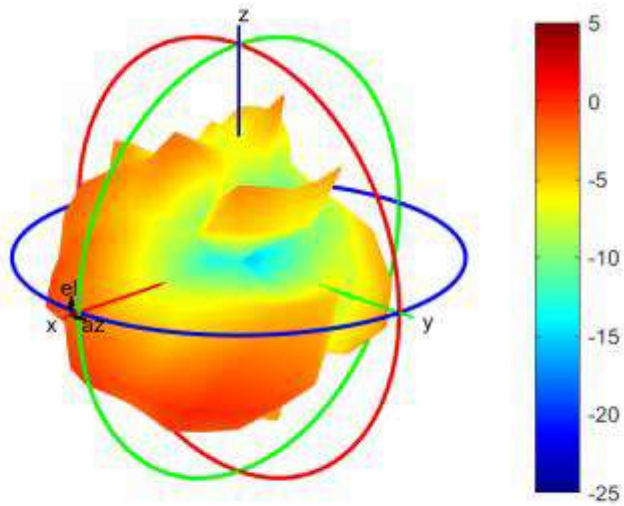
Center Frequency	2300MHz
Horizontal (dBi) peak	-2.08
Vertical (dBi) peak	-1.76

2305MHz



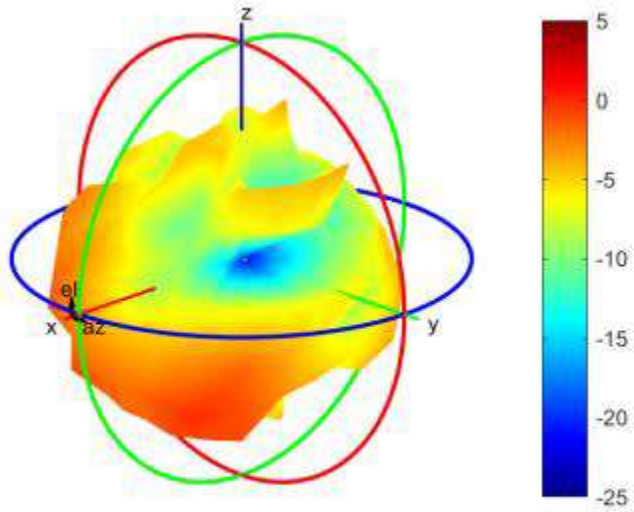
Center Frequency	2305MHz
Horizontal (dBi) peak	-2.19
Vertical (dBi) peak	-1.87

2315MHz



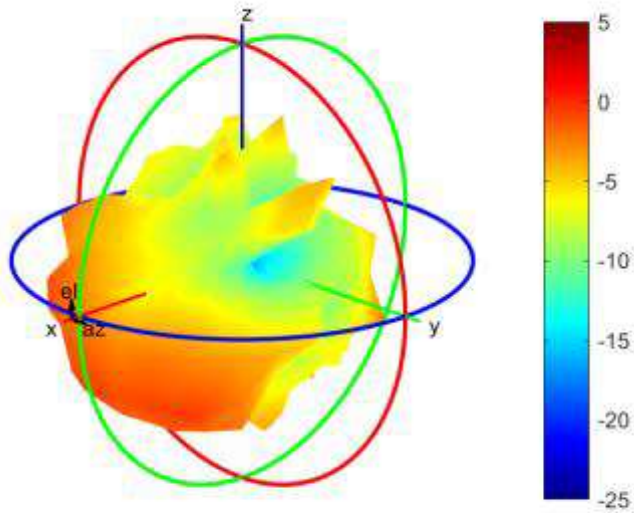
Center Frequency	2315MHz
Horizontal (dBi) peak	-2.32
Vertical (dBi) peak	-1.40

2350MHz



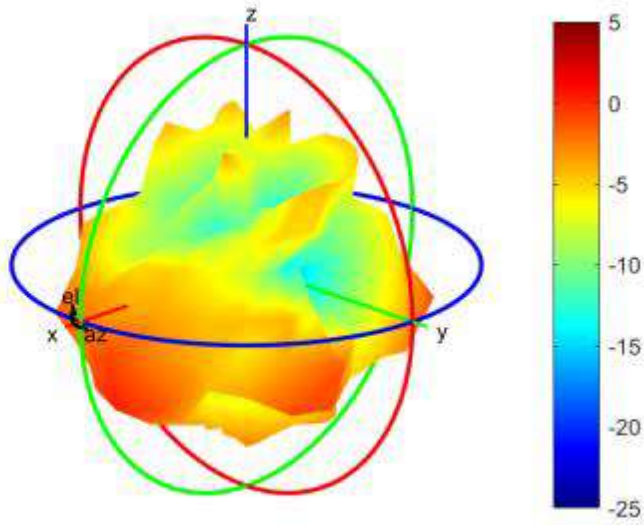
Center Frequency	2350MHz
Horizontal (dBi) peak	-2.25
Vertical (dBi) peak	-1.83

2400MHz



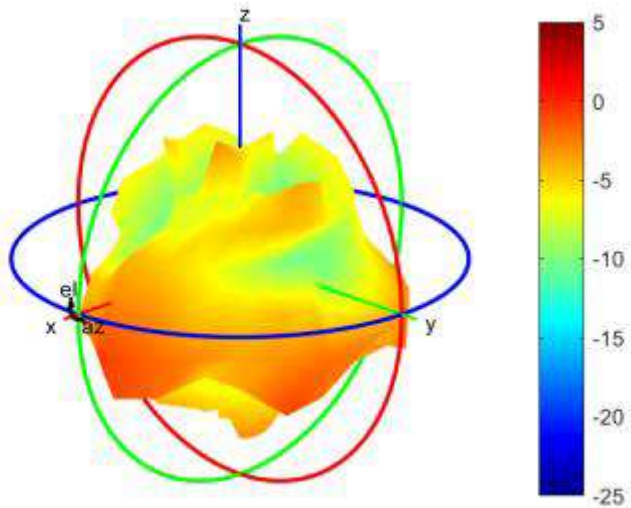
Center Frequency	2400MHz
Horizontal (dBi) peak	-2.53
Vertical (dBi) peak	-1.59

2500MHz



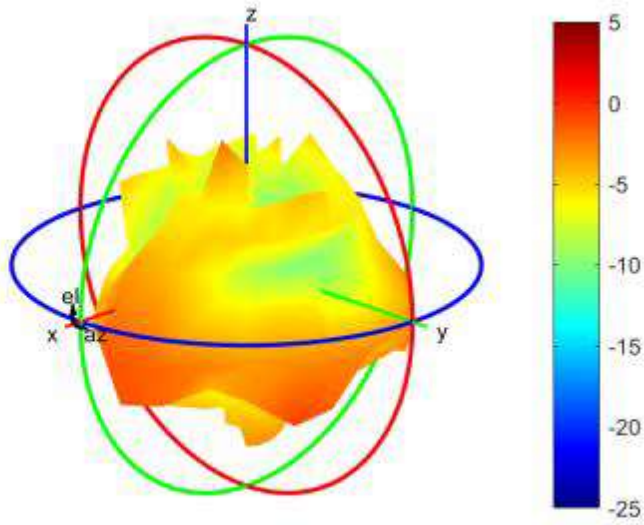
Center Frequency	2500MHz
Horizontal (dBi) peak	-2.17
Vertical (dBi) peak	-2.54

2570MHz



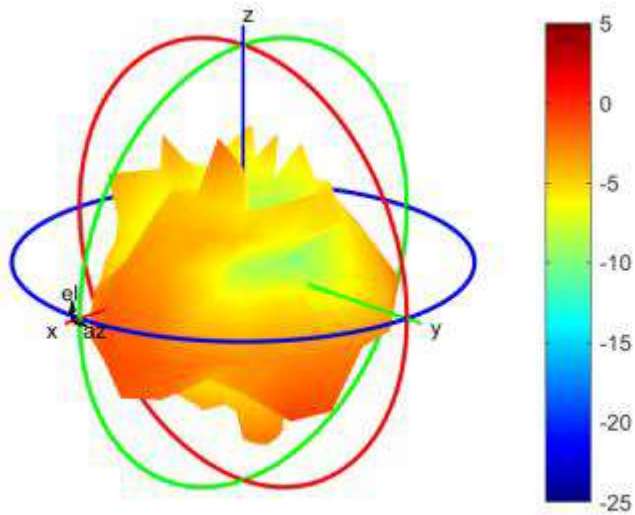
Center Frequency	2570MHz
Horizontal (dBi) peak	-1.66
Vertical (dBi) peak	-3.05

2595MHz



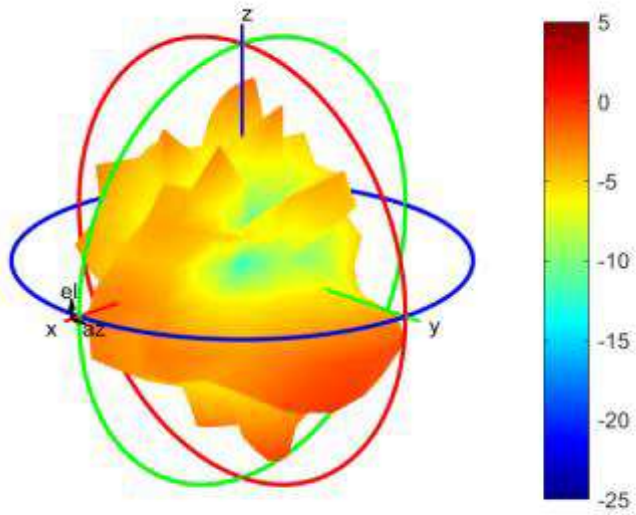
Center Frequency	2595MHz
Horizontal (dBi) peak	-2.24
Vertical (dBi) peak	-2.64

2620MHz



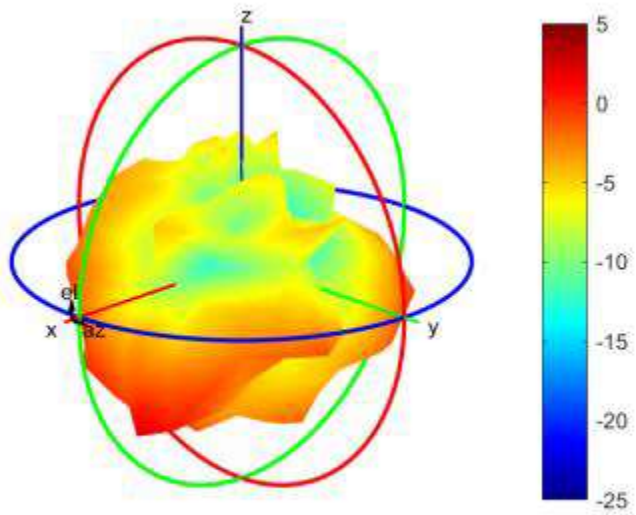
Center Frequency	2620MHz
Horizontal (dBi) peak	-3.07
Vertical (dBi) peak	-2.44

2690MHz



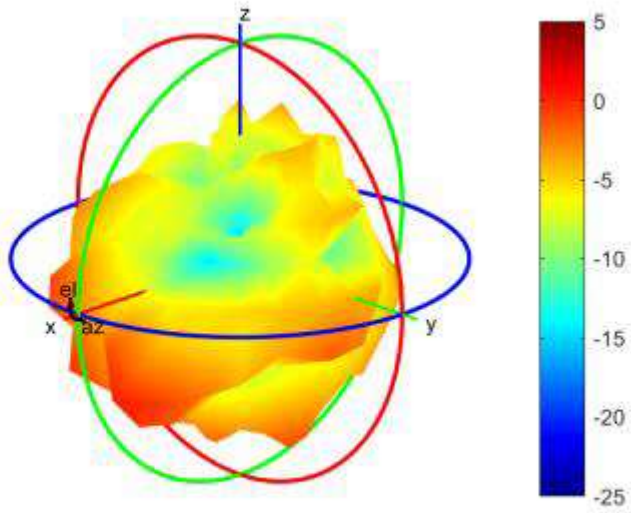
Center Frequency	2690MHz
Horizontal (dBi) peak	-2.24
Vertical (dBi) peak	-2.25

3400MHz



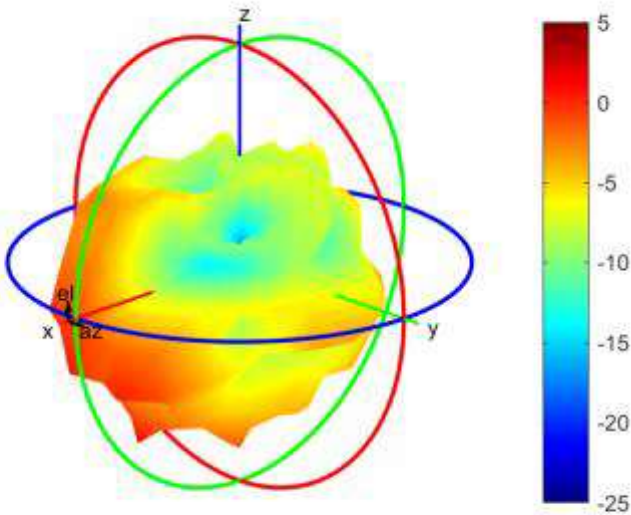
Center Frequency	3400MHz
Horizontal (dBi) peak	0.02
Vertical (dBi) peak	-0.46

3500MHz



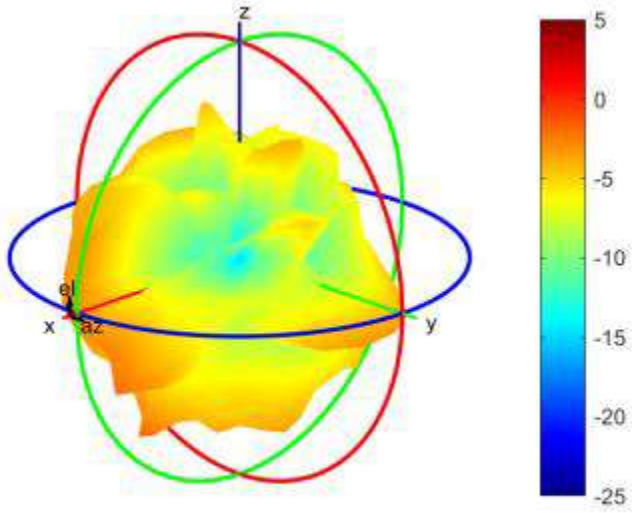
Center Frequency	3500MHz
Horizontal (dBi) peak	-0.16
Vertical (dBi) peak	-0.11

3600MHz



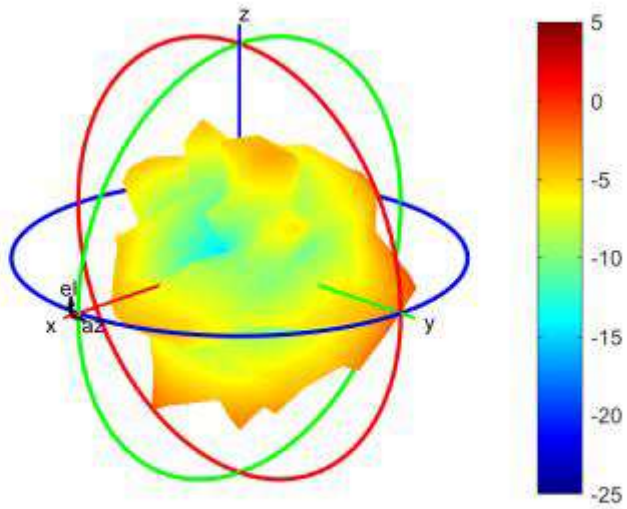
Center Frequency	3600MHz
Horizontal (dBi) peak	0.49
Vertical (dBi) peak	-0.29

3700MHz



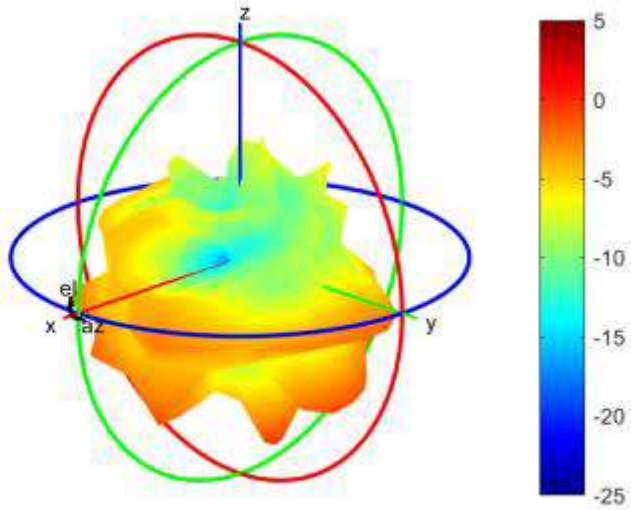
Center Frequency	3700MHz
Horizontal (dBi) peak	-2.29
Vertical (dBi) peak	-3.39

3800MHz



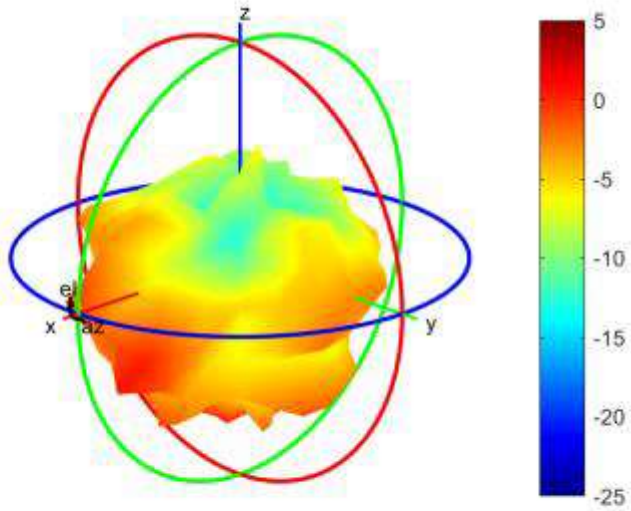
Center Frequency	3800MHz
Horizontal (dBi) peak	0.01
Vertical (dBi) peak	-1.41

4200MHz



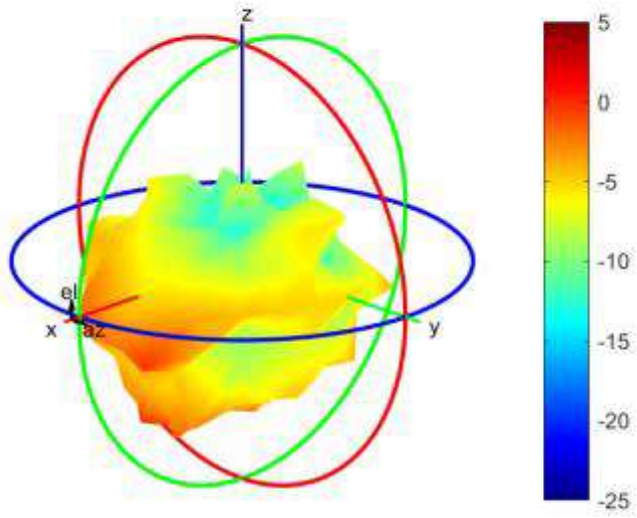
Center Frequency	4200MHz
Horizontal (dBi) peak	-0.74
Vertical (dBi) peak	0.09

4400MHz



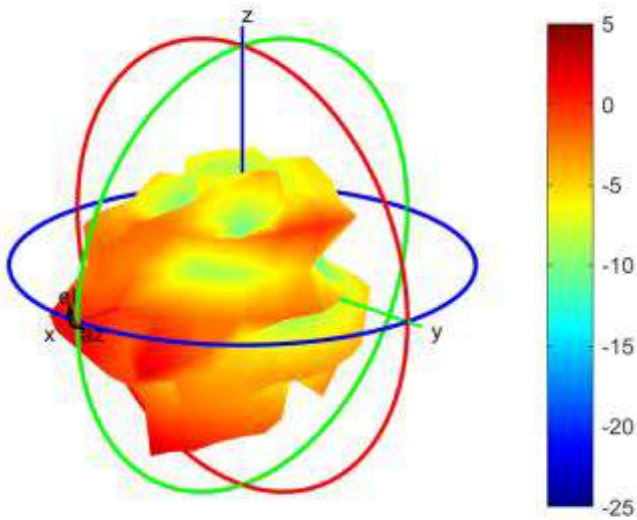
Center Frequency	4400MHz
Horizontal (dBi) peak	-0.37
Vertical (dBi) peak	-0.72

4700MHz



Center Frequency	4700MHz
Horizontal (dBi) peak	-0.91
Vertical (dBi) peak	-2.48

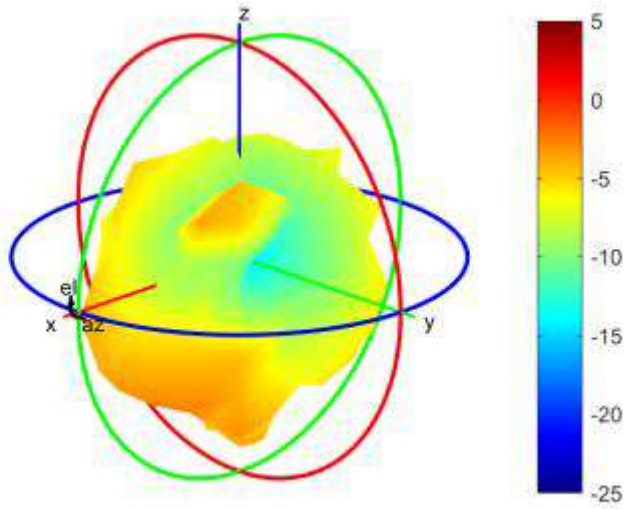
5000MHz



Center Frequency	5000MHz
Horizontal (dBi) peak	-1.99
Vertical (dBi) peak	-1.72

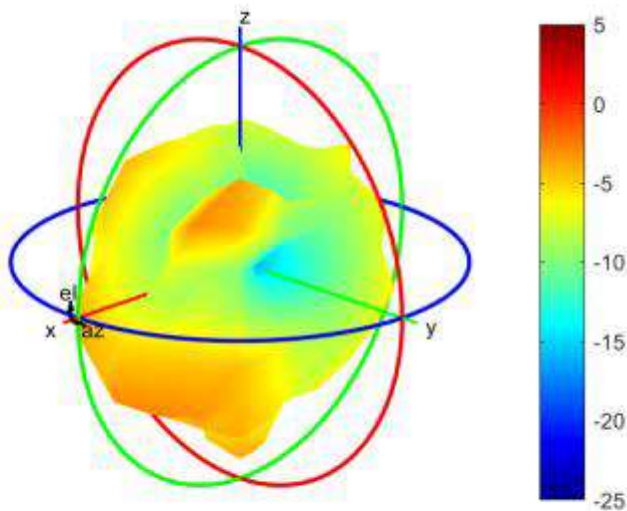
MIMO3 Antenna (DRx1)

1805 MHz



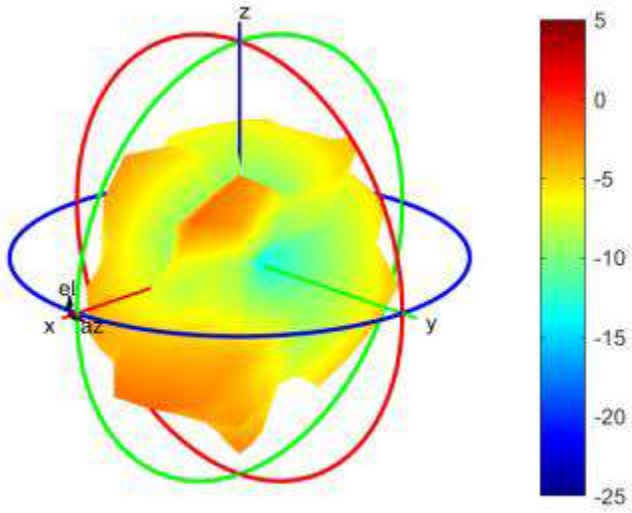
Center Frequency	1805 MHz
Horizontal (dBi) peak	-2.63
Vertical (dBi) peak	-4.98

1850 MHz



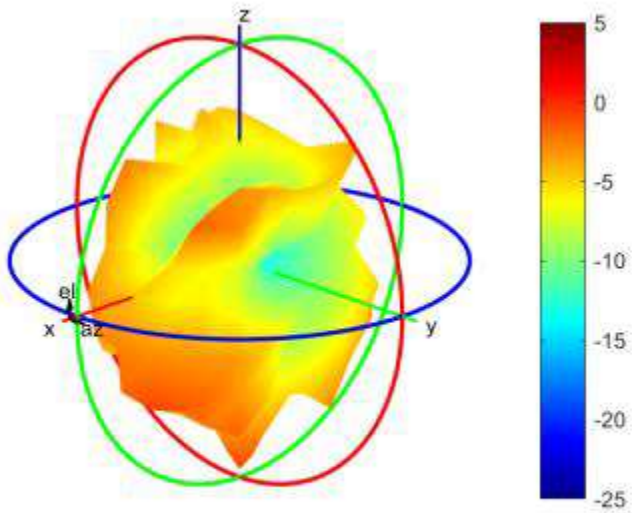
Center Frequency	1850 MHz
Horizontal (dBi) peak	-2.56
Vertical (dBi) peak	-4.49

1880 MHz



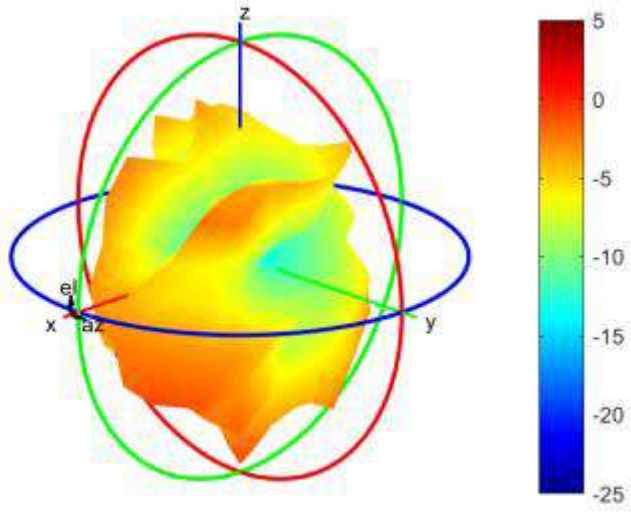
Center Frequency	1880 MHz
Horizontal (dBi) peak	-1.65
Vertical (dBi) peak	-3.57

1910MHz



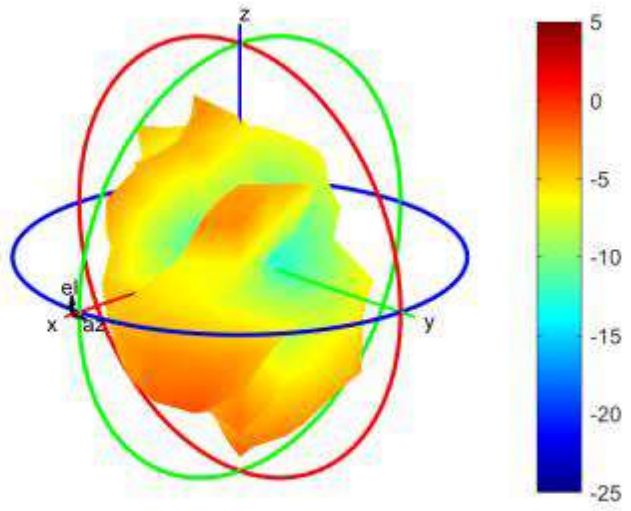
Center Frequency	1910MHz
Horizontal (dBi) peak	-1.90
Vertical (dBi) peak	-2.74

1920MHz



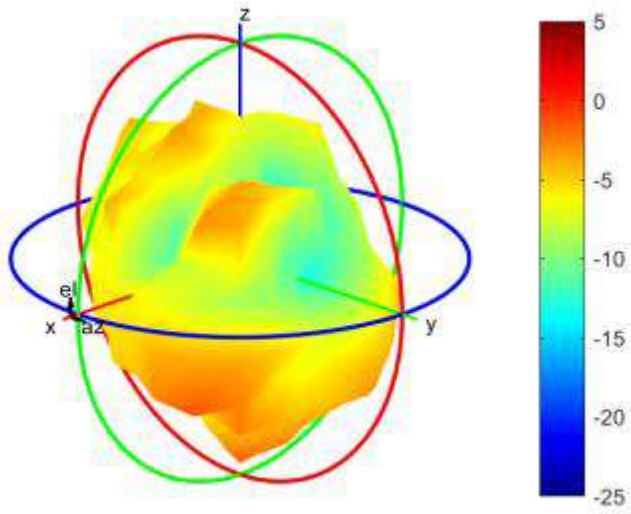
Center Frequency	1920MHz
Horizontal (dBi) peak	-2.18
Vertical (dBi) peak	-2.54

1950MHz



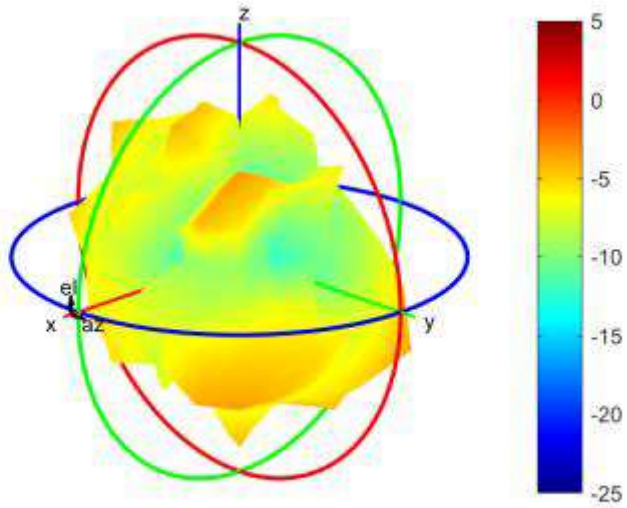
Center Frequency	1950MHz
Horizontal (dBi) peak	-2.01
Vertical (dBi) peak	-3.26

1980MHz



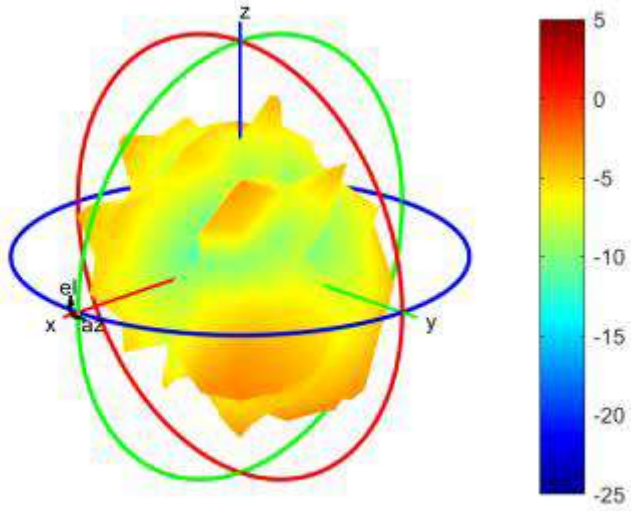
Center Frequency	1980MHz
Horizontal (dBi) peak	-2.00
Vertical (dBi) peak	-4.24

2110MHz



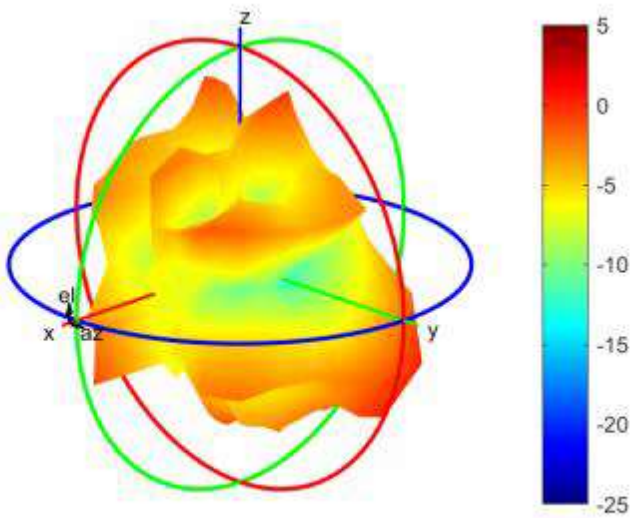
Center Frequency	2110MHz
Horizontal (dBi) peak	-3.05
Vertical (dBi) peak	-4.79

2200MHz



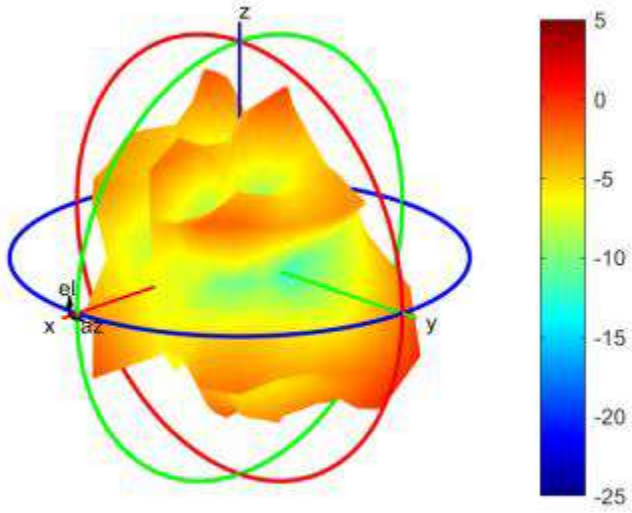
Center Frequency	2200MHz
Horizontal (dBi) peak	-2.50
Vertical (dBi) peak	-3.11

2300MHz



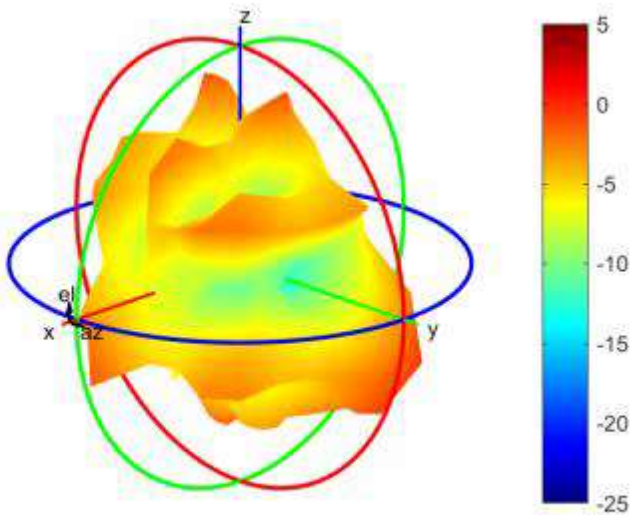
Center Frequency	2300MHz
Horizontal (dBi) peak	-0.57
Vertical (dBi) peak	-3.11

2305MHz



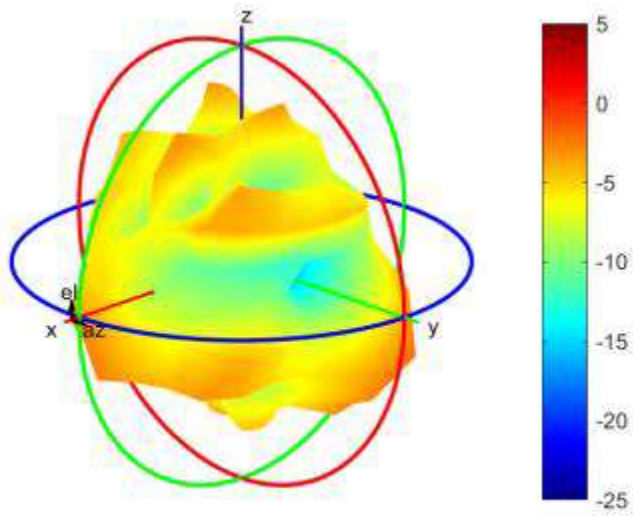
Center Frequency	2305MHz
Horizontal (dBi) peak	-1.32
Vertical (dBi) peak	-2.92

2315MHz



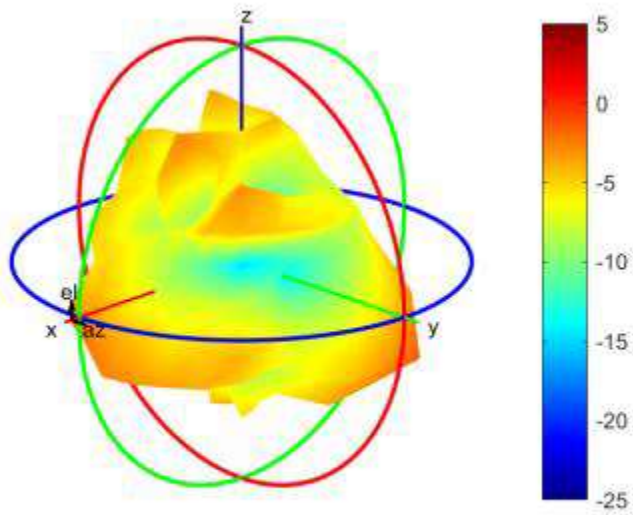
Center Frequency	2315MHz
Horizontal (dBi) peak	-1.11
Vertical (dBi) peak	-2.72

2350MHz



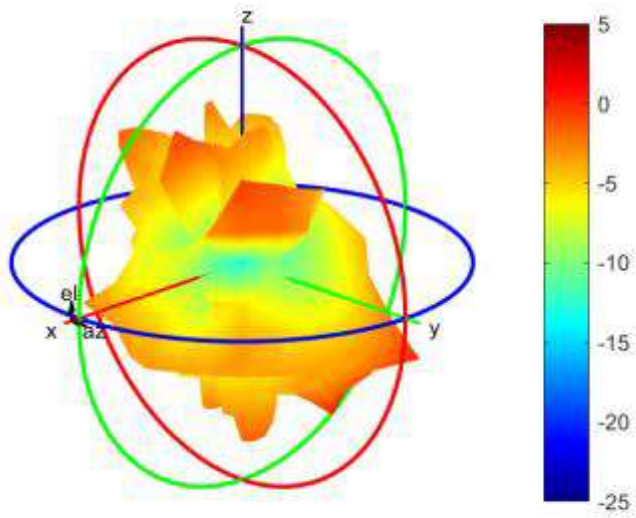
Center Frequency	2350MHz
Horizontal (dBi) peak	-1.48
Vertical (dBi) peak	-3.13

2400MHz



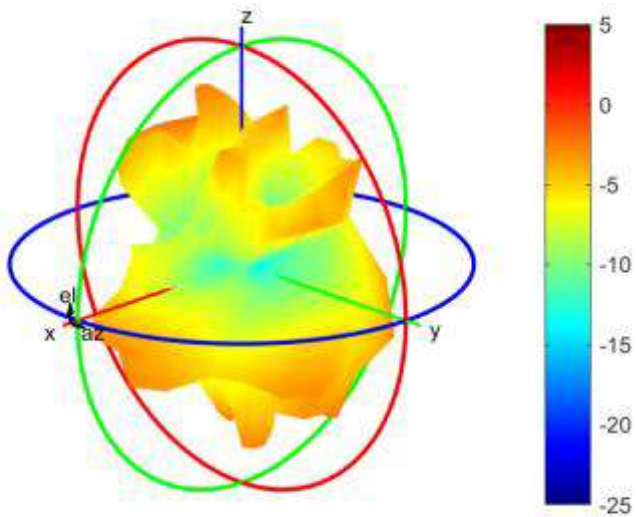
Center Frequency	2400MHz
Horizontal (dBi) peak	-1.18
Vertical (dBi) peak	-2.87

2500MHz



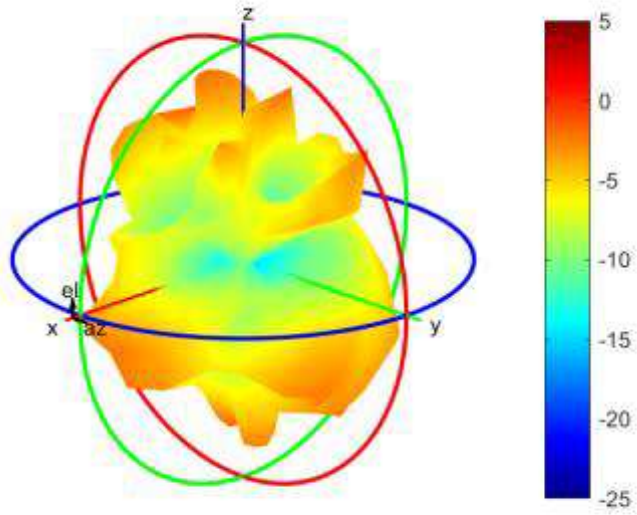
Center Frequency	2500MHz
Horizontal (dBi) peak	-1.13
Vertical (dBi) peak	-0.81

2570MHz



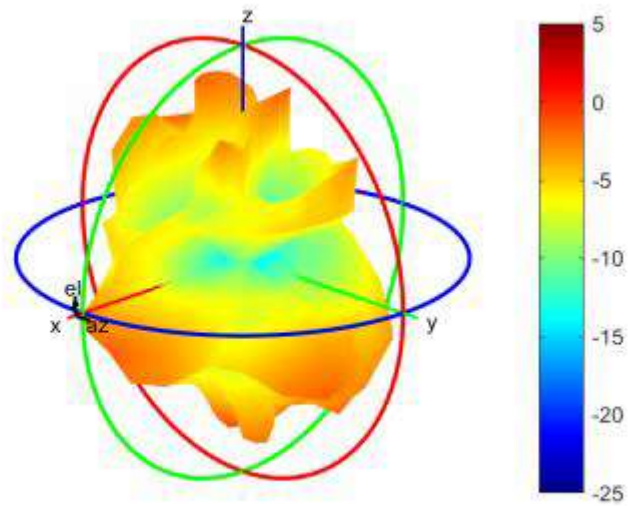
Center Frequency	2570MHz
Horizontal (dBi) peak	-1.67
Vertical (dBi) peak	-3.17

2595MHz



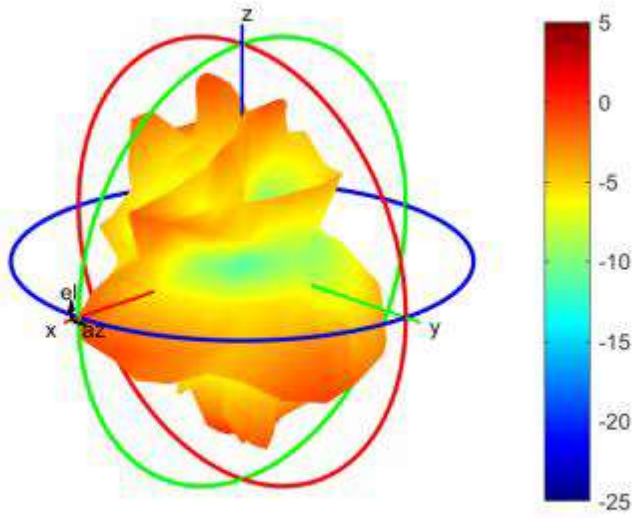
Center Frequency	2595MHz
Horizontal (dBi) peak	-1.81
Vertical (dBi) peak	-3.17

2620MHz



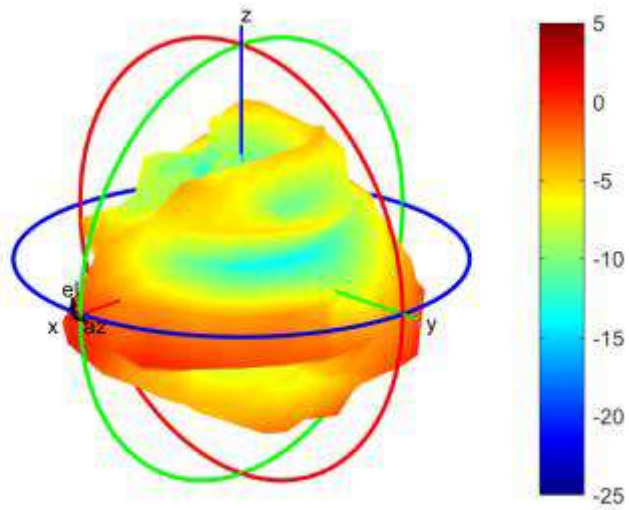
Center Frequency	2620MHz
Horizontal (dBi) peak	-1.99
Vertical (dBi) peak	-2.77

2690MHz



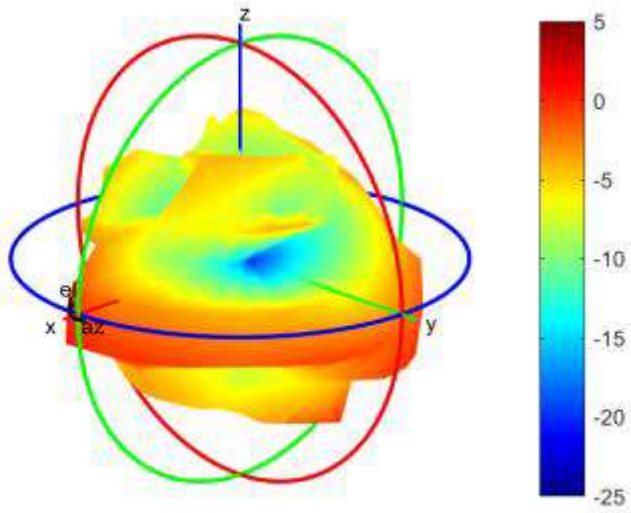
Center Frequency	2690MHz
Horizontal (dBi) peak	-1.41
Vertical (dBi) peak	-2.92

3400MHz



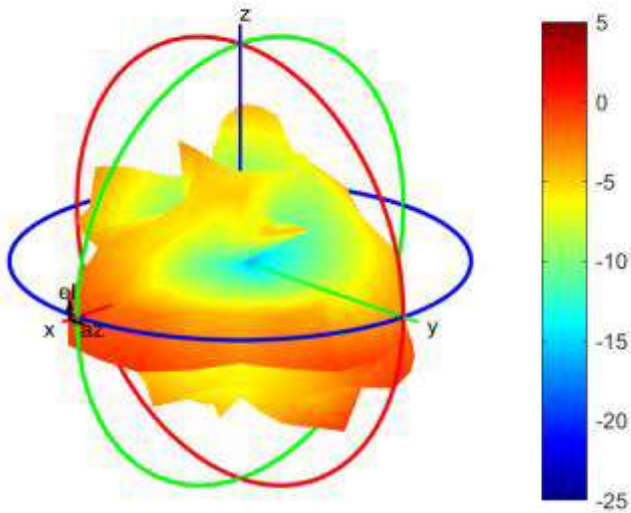
Center Frequency	3400MHz
Horizontal (dBi) peak	0.49
Vertical (dBi) peak	-2.19

3500MHz



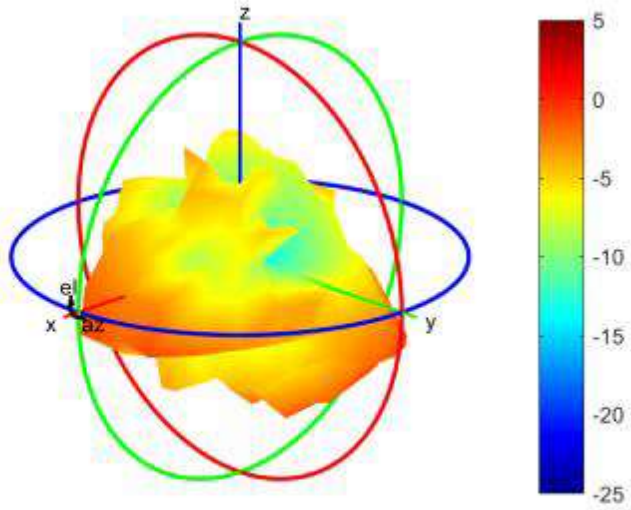
Center Frequency	3500MHz
Horizontal (dBi) peak	-0.25
Vertical (dBi) peak	-1.66

3600MHz



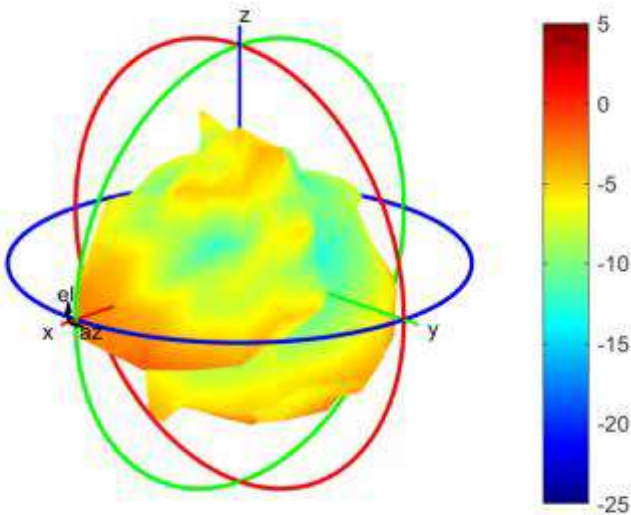
Center Frequency	3600MHz
Horizontal (dBi) peak	-0.01
Vertical (dBi) peak	-2.33

3700MHz



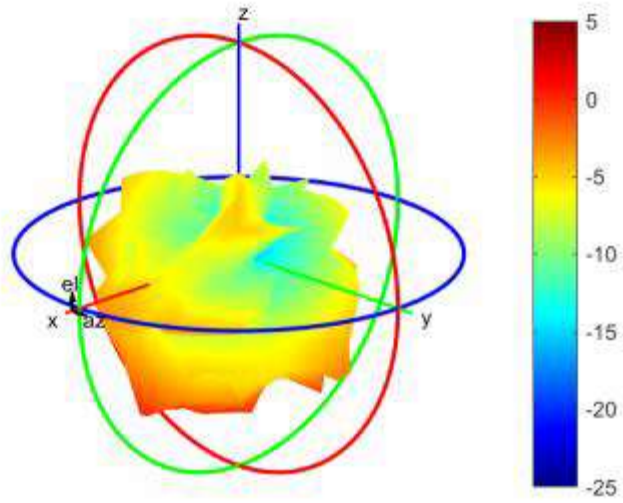
Center Frequency	3700MHz
Horizontal (dBi) peak	0.45
Vertical (dBi) peak	-3.10

3800MHz



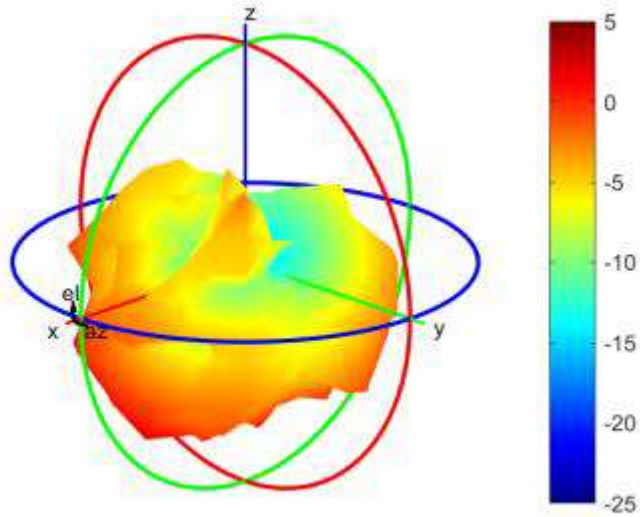
Center Frequency	3800MHz
Horizontal (dBi) peak	-0.63
Vertical (dBi) peak	-2.48

4200MHz



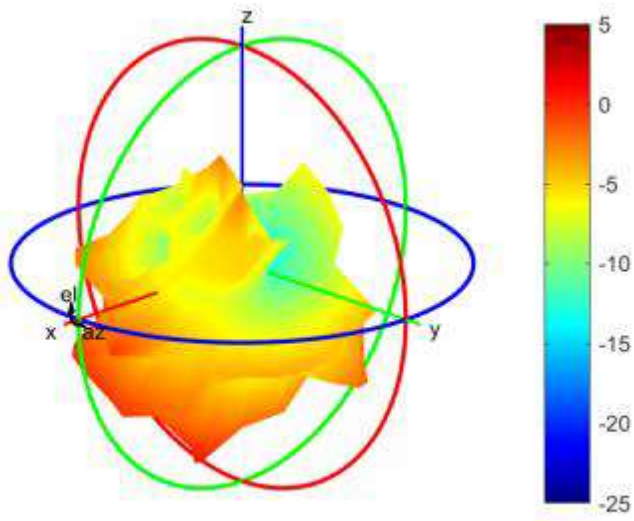
Center Frequency	4200MHz
Horizontal (dBi) peak	-1.58
Vertical (dBi) peak	-1.51

4400MHz



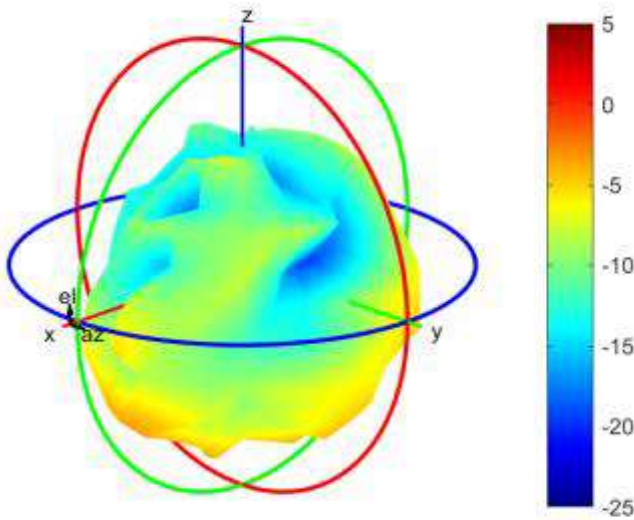
Center Frequency	4400MHz
Horizontal (dBi) peak	-1.54
Vertical (dBi) peak	-1.05

4700MHz



Center Frequency	4700MHz
Horizontal (dBi) peak	-1.49
Vertical (dBi) peak	-1.37

5000MHz

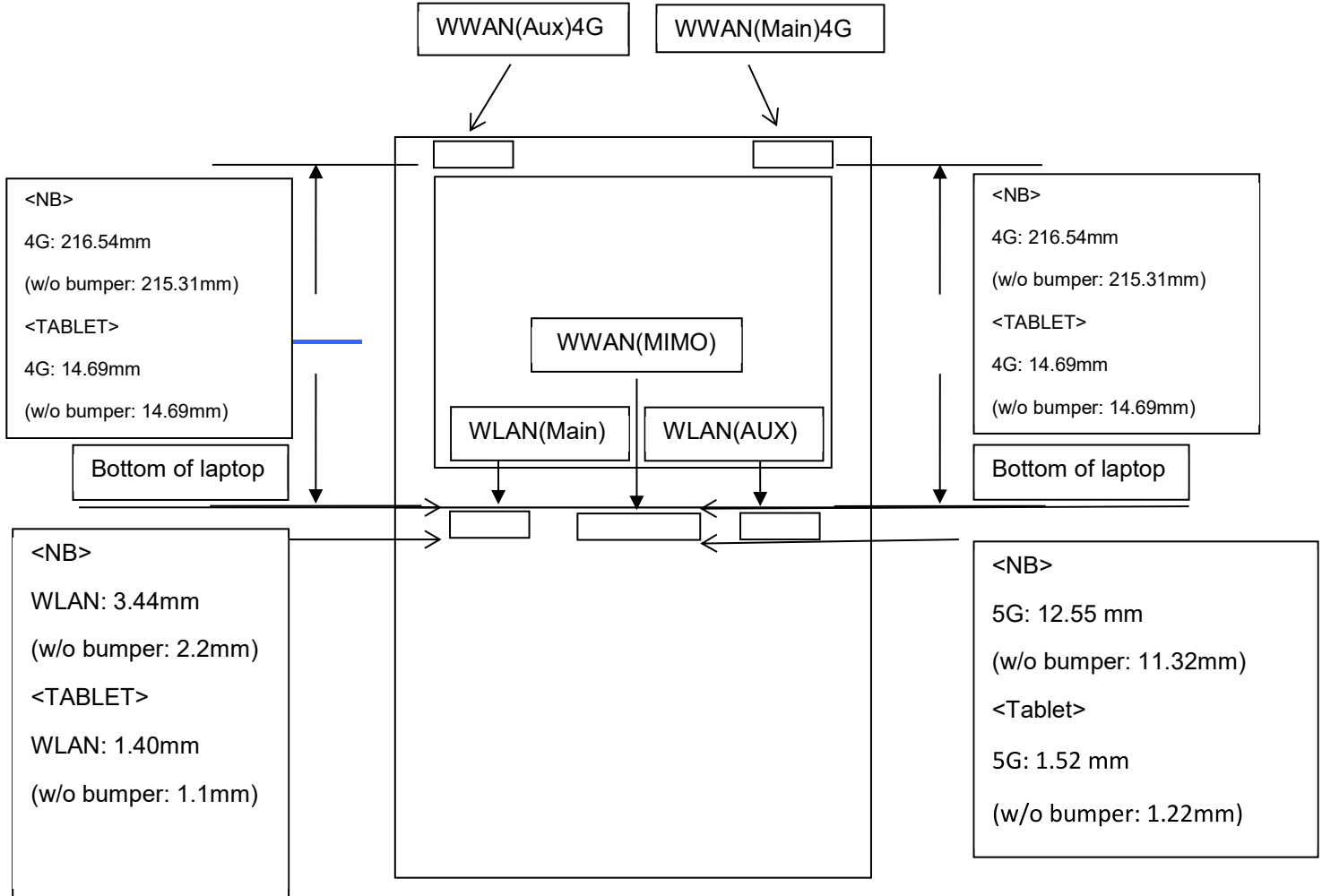


Center Frequency	5000MHz
Horizontal (dBi) peak	-3.91
Vertical (dBi) peak	-4.09

Section 4. Antenna Host Platform Location Information

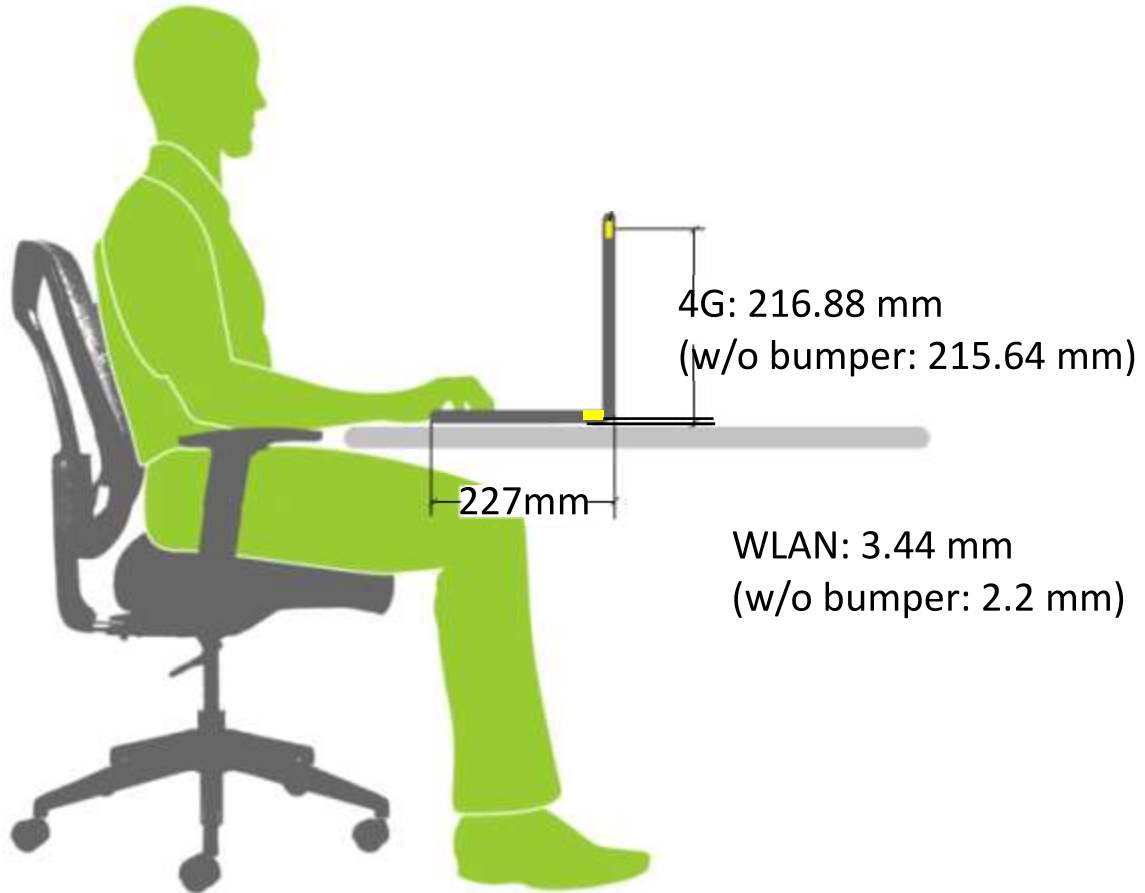
Include a **dimensioned photo(s) or dimensioned drawing(s)** of Main and Aux antenna placements (measurements are not required for receive-only antenna).

Any antenna that transmits must show dimensions to bottom of laptop. Provide a description of the materials that are used for supporting or surrounding transmit antennas; for example, non-conductive plastics vs. conductive coated plastic or metallic materials.



Section 5. Antenna dimensional information for SAR evaluation

Include a **dimensioned photo(s) or dimensioned drawing(s)** showing the distance (mm) between the transmit antennas and the user. For notebook/laptop hosts show lapheld position (example below). For tablet hosts show all orientations including lapheld, primary & secondary portrait, primary & secondary landscape positions. Include a description of any proximity sensors or power throttling implementations that limit or exclude use of any host orientation.



Section 6. Diagram Example of Co-Location Antenna Separation

Include a **dimensioned photo or dimensioned drawing** showing the distance (mm) between **all WLAN transmit antennas** and other co-located radiator transmit antenna such as Bluetooth, WWAN,..

(Note: Due to the evolving rules regarding co-location, each platform will need to be reviewed on a case by case basis)

