

Antenna Passive Test

Antenna Performance

PULSE (SUZHOU) WIRELESS PRODUCTS CO.,LTD.



99 HUOJU RD. SUZHOU
NEW DISTRICT
215009
P.R.CHINA
WWW.PULSEELECTRONICS.COM/ANTENNAS

Prepared: Pan		Approved: Mark
Checked: Mark		Customer: GE Healthcare
Version	Changed Reason	Changed by
01	First Release	Pan
02	Design Changed	Pan
03	Design Changed	Pan
04	Change the RF SPEC	Pan
05	Update the label	Pan

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A. Antenna Assemble Drawing

B. RF Specification

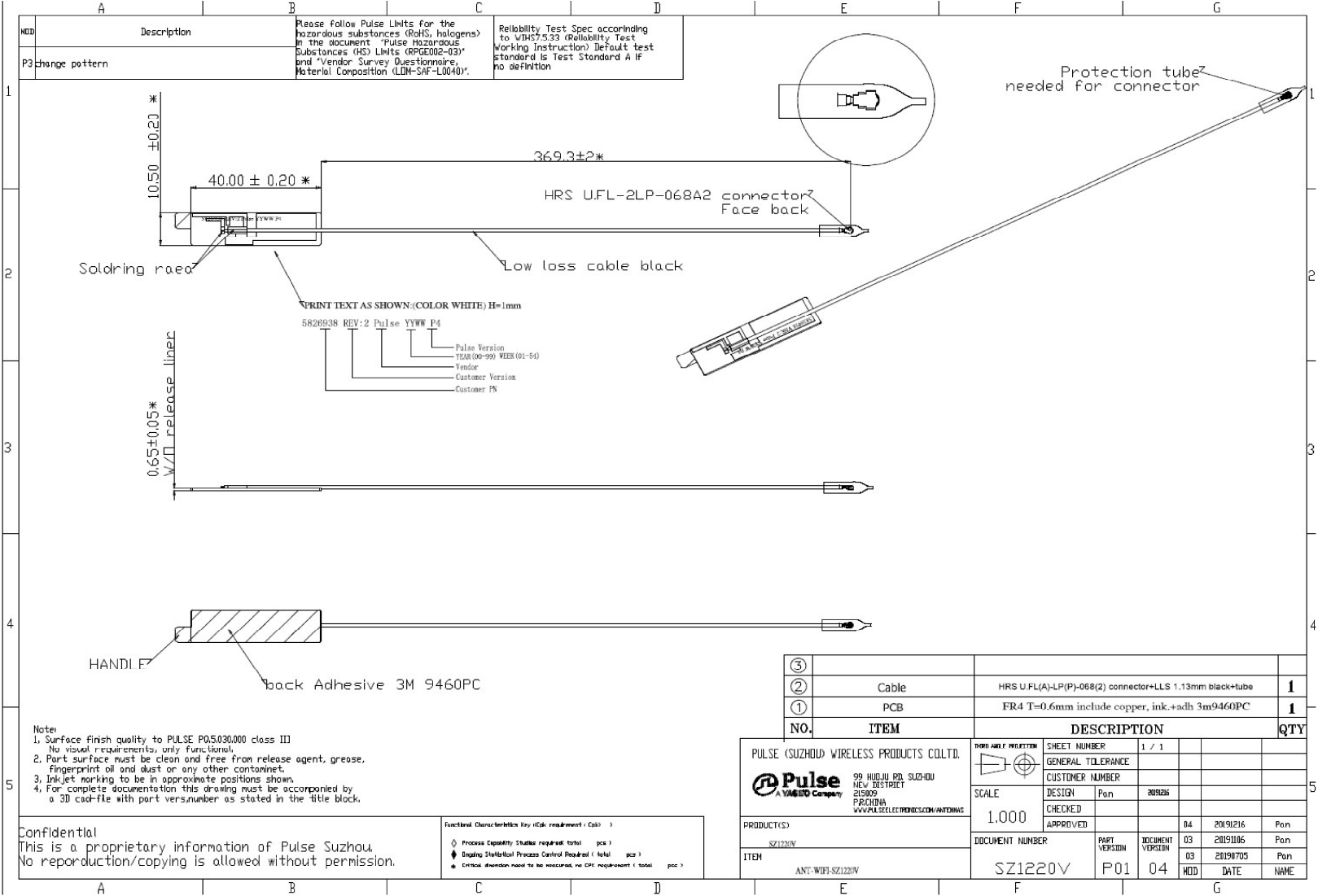
C. Reliability /Environment Test

Date: 2026/3/16

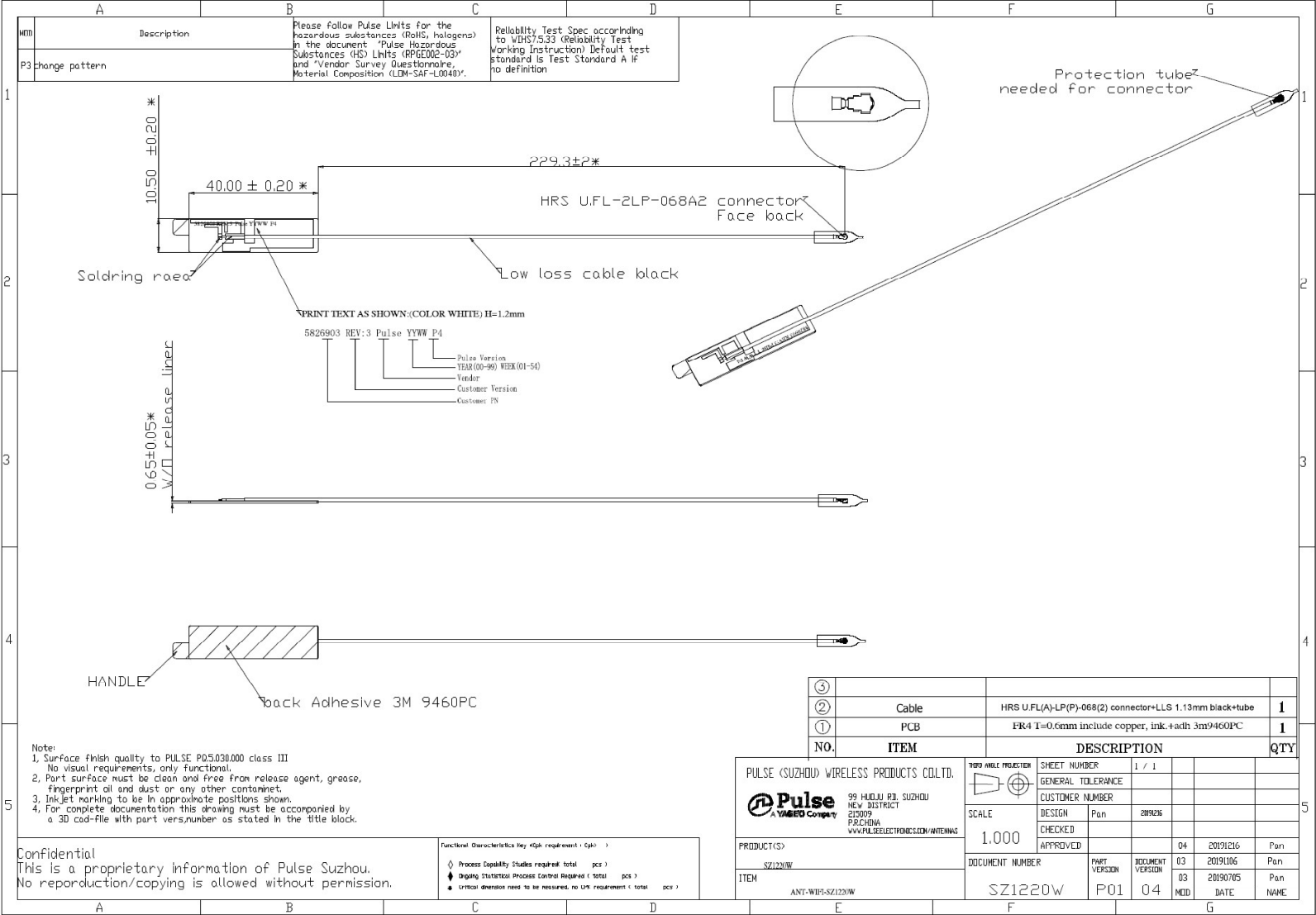
Reliability /Environment Test

Test Items	Test Conditions	Test Time	Sample QTY
Cold Storage test	1.Room Temperatureà-40 degrees within 2 hours 2.Storage for 16 hours at -40 degrees; 3.-40 degrees room temperature within 2 hours	20hrs	5pcs
Dry Heat Storage test	1.Room Temperatureà85 degrees within 2 hours 2.Storage for 16 hours at 85 degrees; 3.85 degrees room temperature within 2 hours	20hrs	5pcs
Damp Heat Cyclic	95% RH @ +25°C for 12 h and 55°C for 12h. in 6 cycles (= 6 days)	144hrs	5pcs
Temperature cycling test	1.Room Temperature to -40 degrees (2hours) 2.Storage for 2 hours at -40 degrees 3.-40 degrees to 85 degrees (2hours) 4.Storage for 2 hours at 85 degrees 5.85 degrees to -40 degrees (2hours) 6.Repeat from 2 to 5 for 5 times 7.-40 degrees increase to room temperature within 2 hours	52hrs	5pcs

Antenna 1



Antenna 2

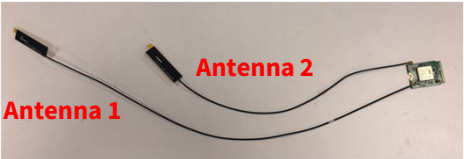


Passive Test- Peak Gain

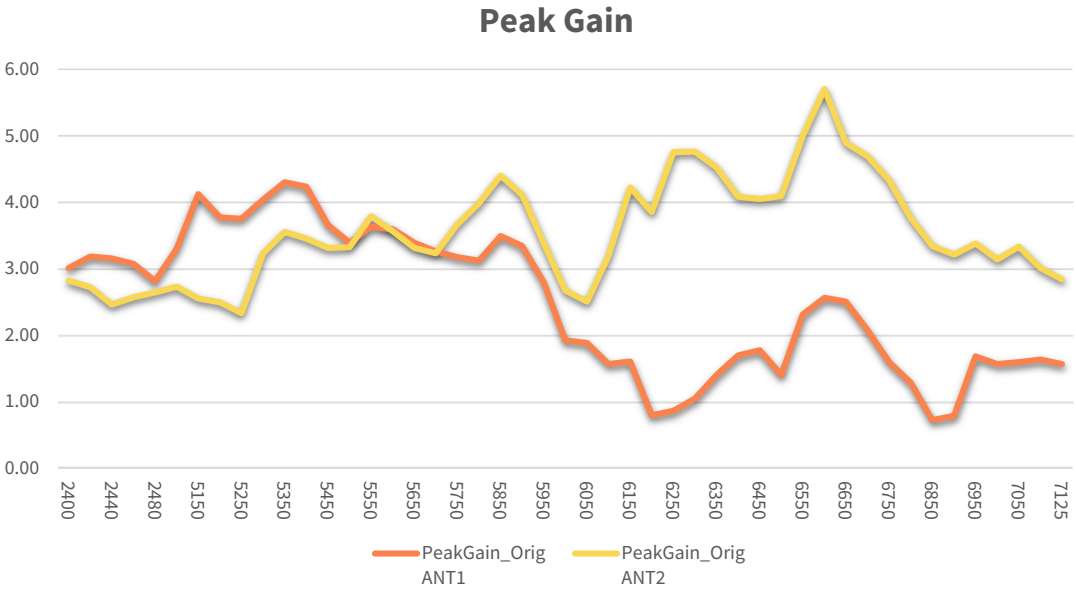
Peak gain

PeakGain_Orig (dBi)		
Frequency (MHz)	ANT1	ANT2
2400	3.01	2.82
2420	3.18	2.72
2440	3.15	2.46
2460	3.07	2.57
2480	2.81	2.64
2500	3.30	2.73
5150	4.12	2.55
5200	3.77	2.49
5250	3.75	2.33
5300	4.04	3.23
5350	4.30	3.55
5400	4.23	3.45
5450	3.66	3.31
5500	3.39	3.32
5550	3.63	3.79
5600	3.59	3.56
5650	3.39	3.31
5700	3.26	3.23
5750	3.17	3.67
5800	3.12	3.98
5850	3.49	4.40
5900	3.34	4.11
5950	2.79	3.38

PeakGain_Orig (dBi)		
Frequency (MHz)	ANT1	ANT2
6000	1.92	2.67
6050	1.88	2.50
6100	1.56	3.19
6150	1.60	4.22
6200	0.79	3.85
6250	0.86	4.75
6300	1.04	4.76
6350	1.40	4.52
6400	1.69	4.08
6450	1.77	4.05
6500	1.40	4.09
6550	2.31	5.00
6600	2.56	5.70
6650	2.50	4.89
6700	2.07	4.69
6750	1.59	4.33
6800	1.28	3.76
6850	0.72	3.34
6900	0.78	3.21
6950	1.68	3.38
7000	1.56	3.14
7050	1.59	3.33
7100	1.63	3.01
7125	1.56	2.84



WLAN	Peak Gain(Max.)		
	2.4~2.5GHz	5.15~5.95GHz	6~7.125 GHz
PeakGain_Orig ANT1	3.30dBi	4.3dBi	2.56dBi
PeakGain_Orig ANT2	2.82dBi	4.4dBi	5.7dBi



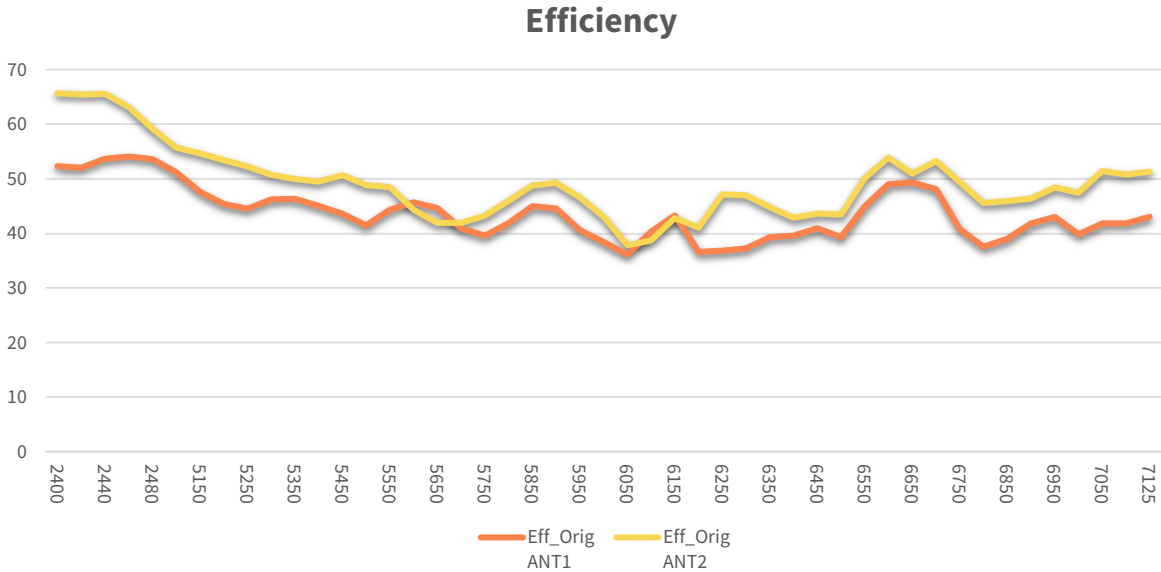
Passive Test- Efficiency

Eff_Orig (%)		
Frequency (MHz)	ANT1	ANT2
2400	52.28	65.63
2420	51.97	65.44
2440	53.63	65.54
2460	54.07	63.12
2480	53.57	59.15
2500	51.16	55.67
5150	47.57	54.61
5200	45.36	53.38
5250	44.49	52.25
5300	46.19	50.7
5350	46.33	49.92
5400	45.03	49.47
5450	43.56	50.62
5500	41.44	48.83
5550	44.32	48.47
5600	45.67	44.34
5650	44.63	41.91
5700	40.85	41.88
5750	39.57	43.26
5800	41.83	45.95
5850	44.95	48.76
5900	44.52	49.23
5950	40.54	46.53

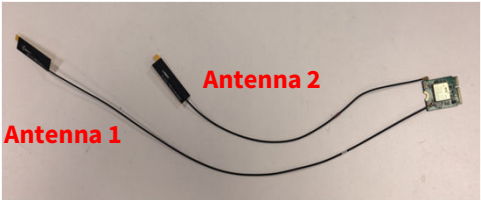
Eff_Orig (%)		
Frequency (MHz)	ANT1	ANT2
6000	38.37	43.05
6050	36.14	37.83
6100	40.27	38.67
6150	43.25	42.77
6200	36.56	41.04
6250	36.81	47.15
6300	37.24	46.95
6350	39.26	44.8
6400	39.54	42.84
6450	40.93	43.62
6500	39.26	43.46
6550	44.98	50.13
6600	48.98	53.86
6650	49.32	50.96
6700	48.08	53.24
6750	40.74	49.37
6800	37.5	45.56
6850	38.99	45.91
6900	41.78	46.34
6950	42.95	48.42
7000	39.81	47.39
7050	41.78	51.39
7100	41.78	50.76
7125	43.05	51.29



WLAN		Efficiency		
		2.4~2.5GHz	5.15~5.95GHz	6~7.125 GHz
	Eff_Orig ANT1	>51.16%	>39.37%	>36.14%
	Eff_Orig ANT2	>55.67%	>41.88%	>37.83%



Passive Test- S11

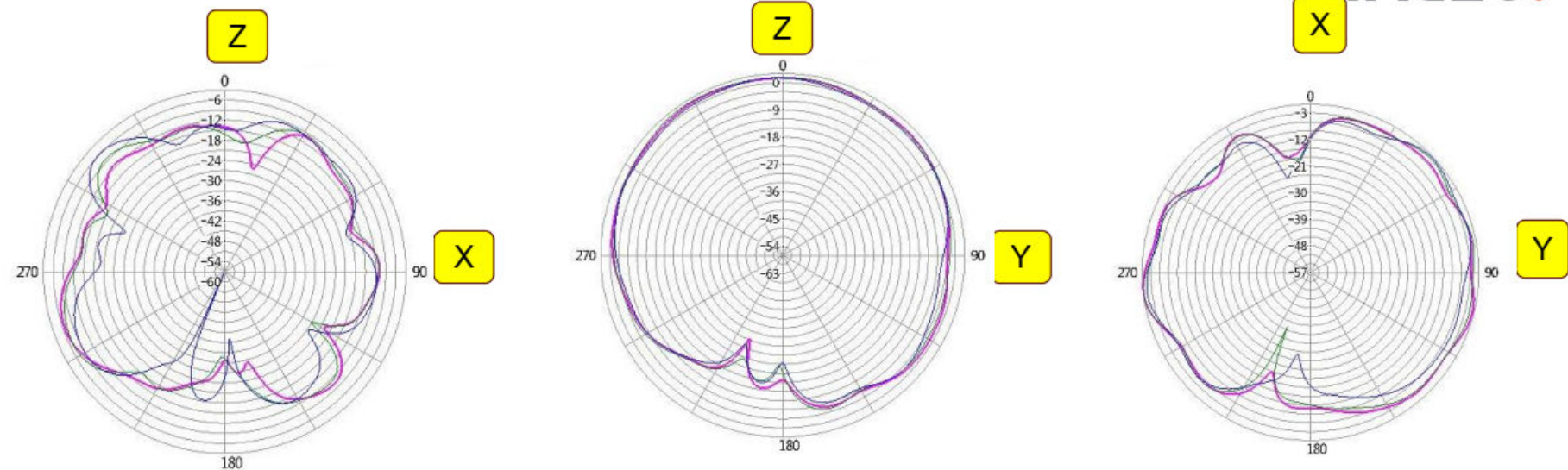


S11		
	Original	
S11(MAX.)	2.4~2.5GHz	5.15~7.125 GHz
ANT1	-8.98dB	-8.60dB
ANT2	-11.199dB	-7.45dB



antenna#1 X-Z / Y-Z / X-Y Plane 2D radiation pattern

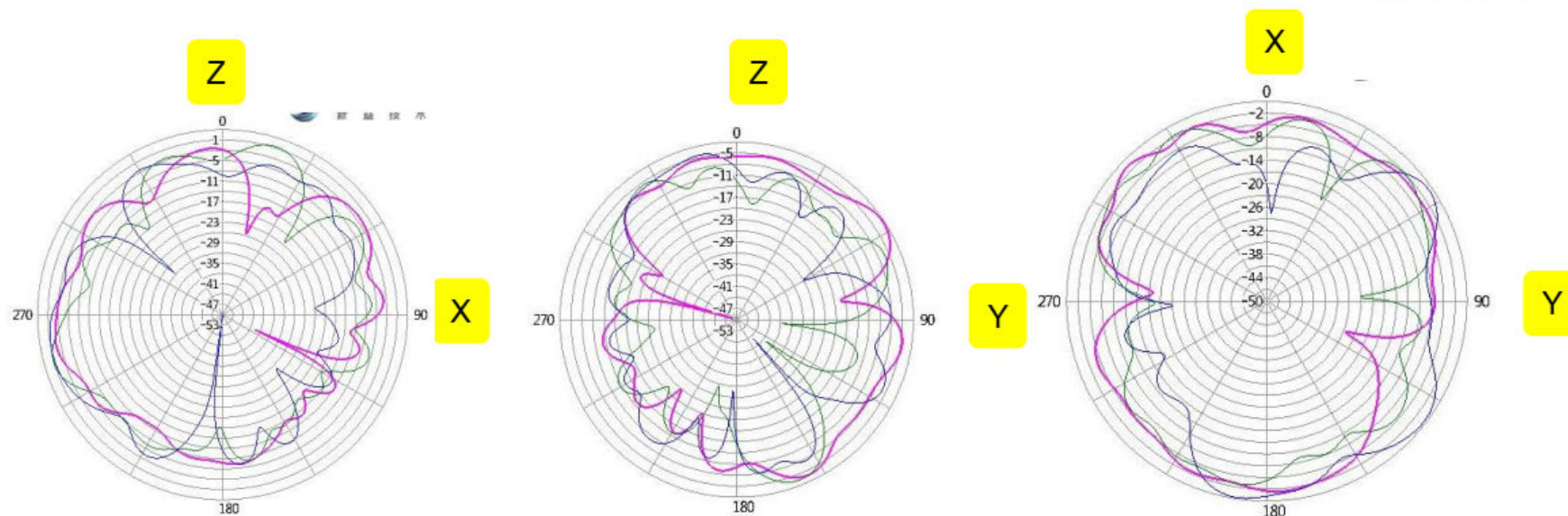
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2.4GHz red
2.44GHz green
2.5GHz blue

antenna#1 X-Z / Y-Z / X-Y Plane 2D radiation pattern

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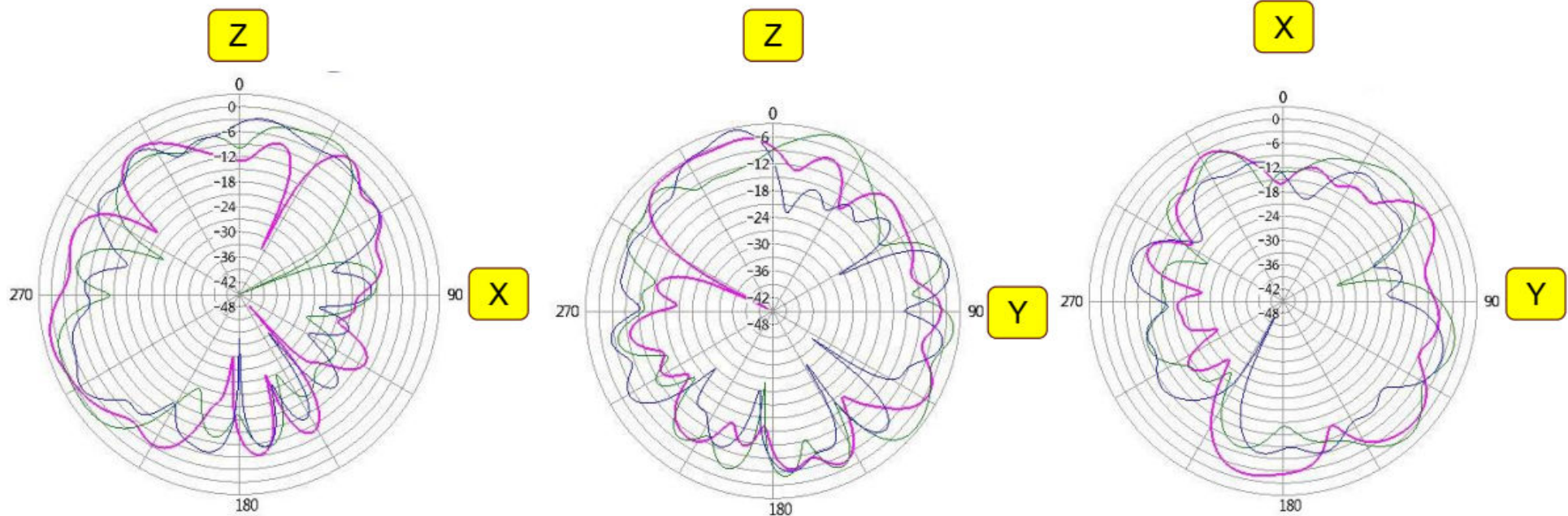
5.15GHz red
5.51GHz green
5.85GHz blue

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antenna#1 X-Z / Y-Z / X-Y Plane 2D radiation pattern

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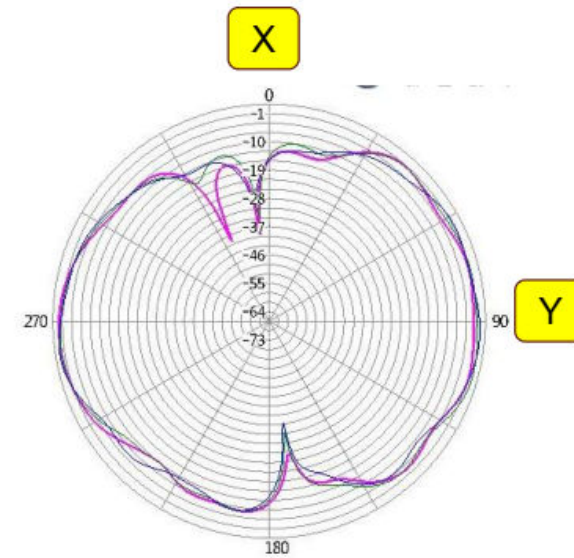
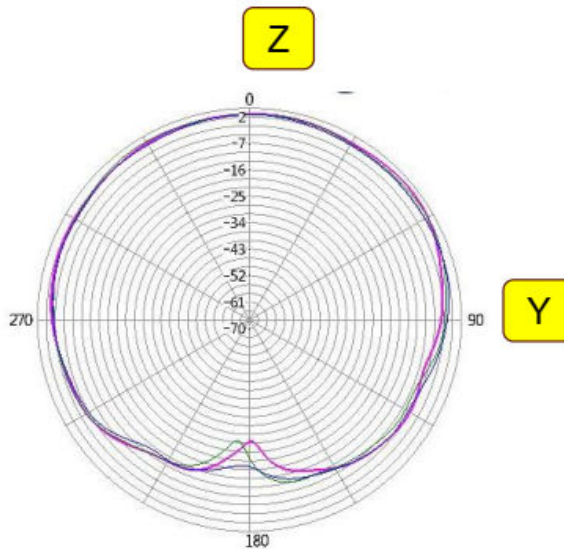
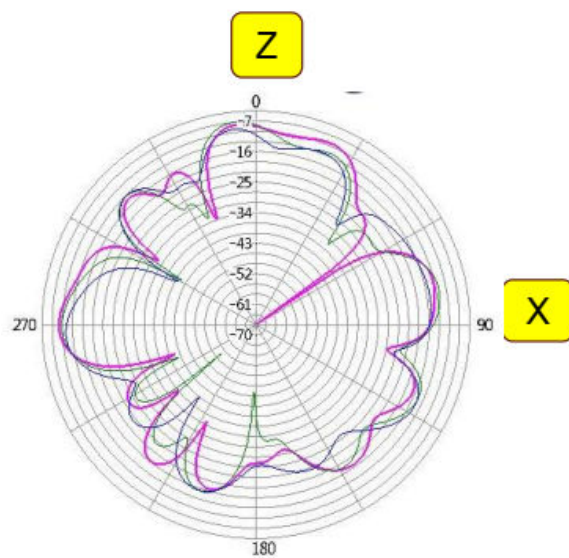
6GHz red
6.5GHz green
7.125GHz blue

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antenna#2 X-Z / Y-Z / X-Y Plane 2D radiation pattern

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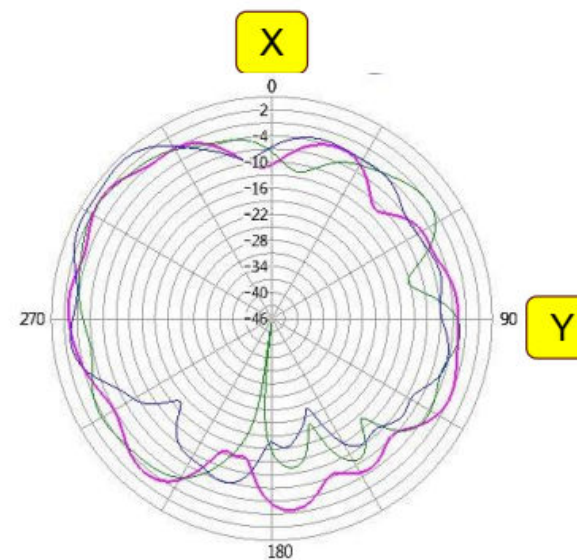
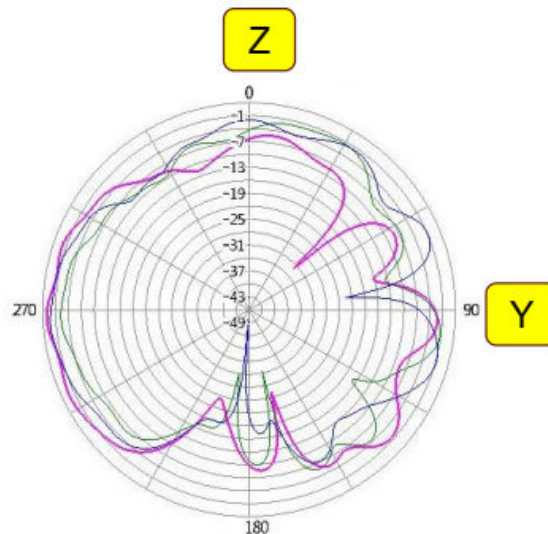
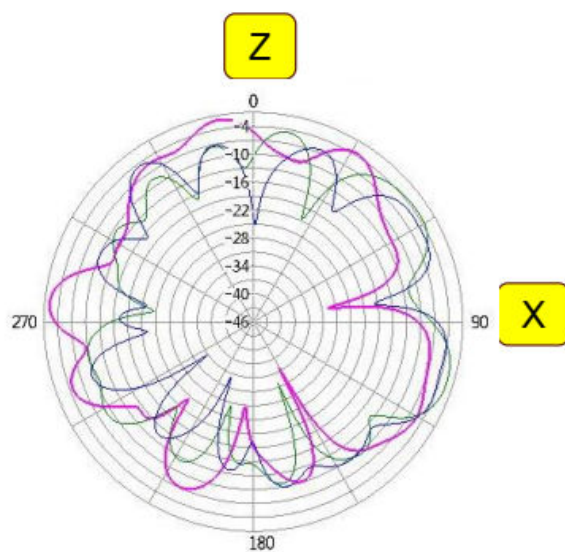
2.4GHz red
2.44GHz green
2.5GHz blue

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antenna#2 X-Z / Y-Z / X-Y Plane 2D radiation pattern

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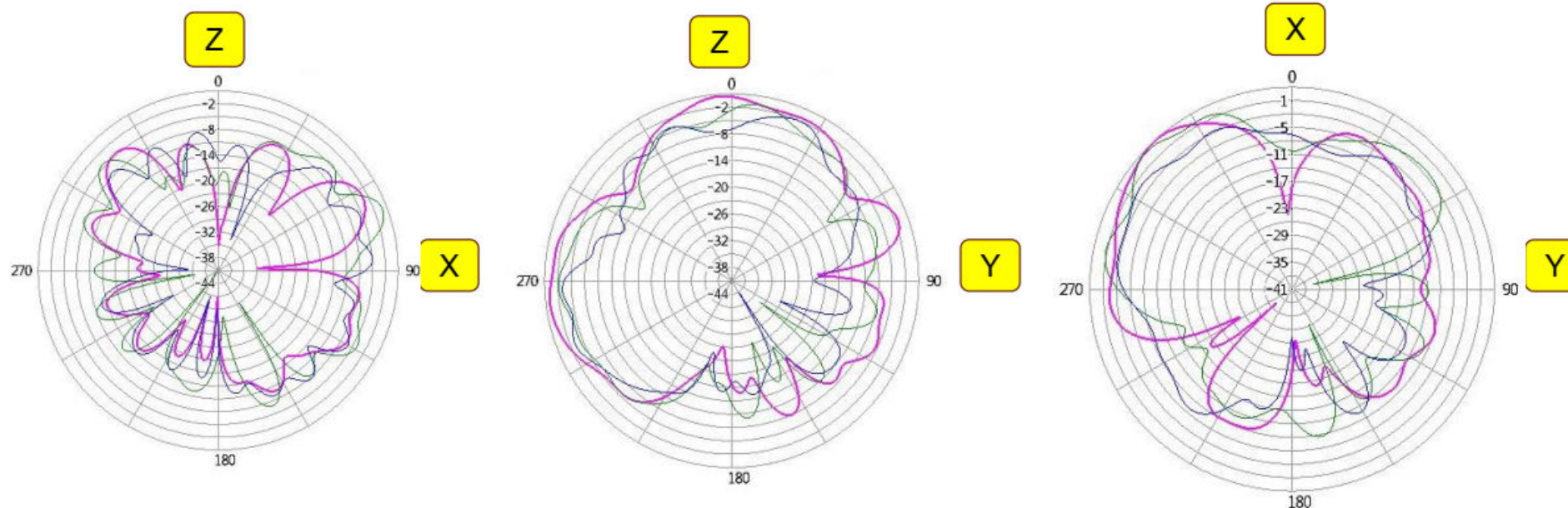
5.15GHz red
5.51GHz green
5.85GHz blue

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antenna#2 X-Z / Y-Z / X-Y Plane 2D radiation pattern

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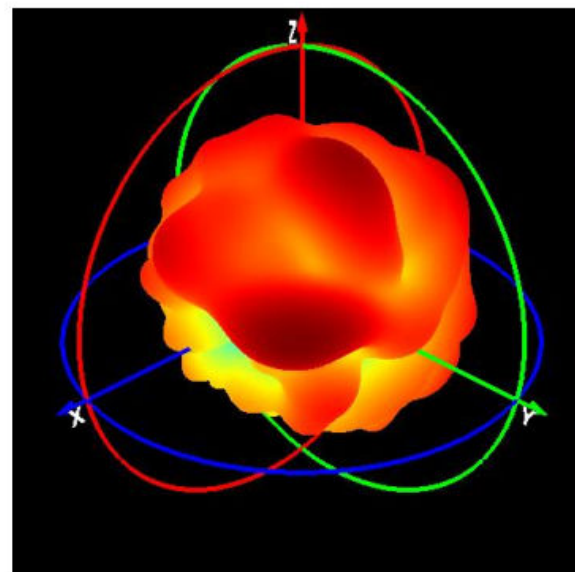
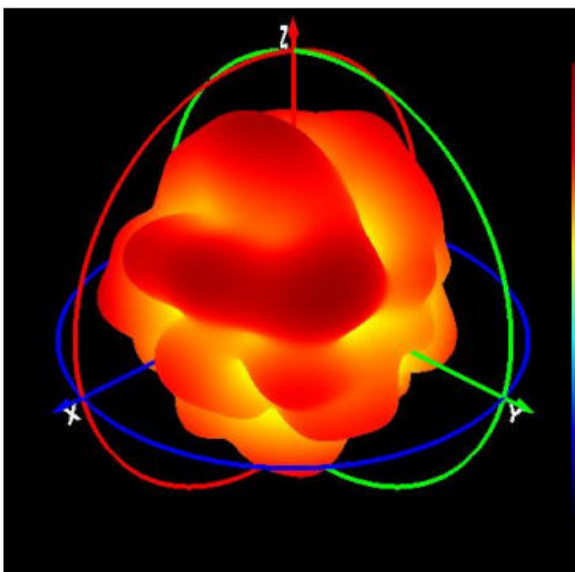
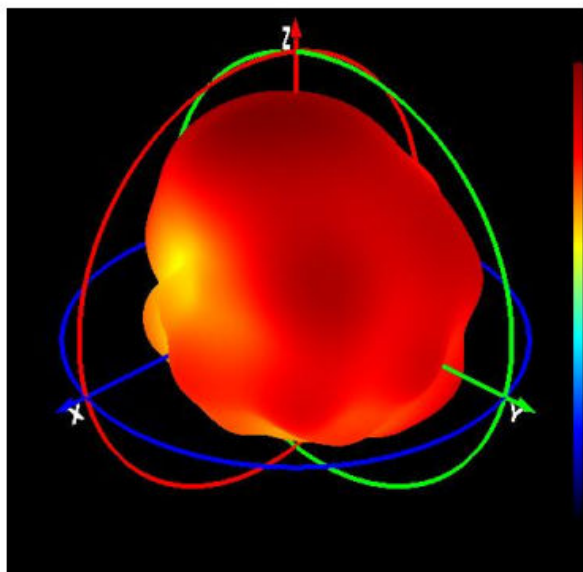
6GHz red
6.5GHz green
7.125GHz blue

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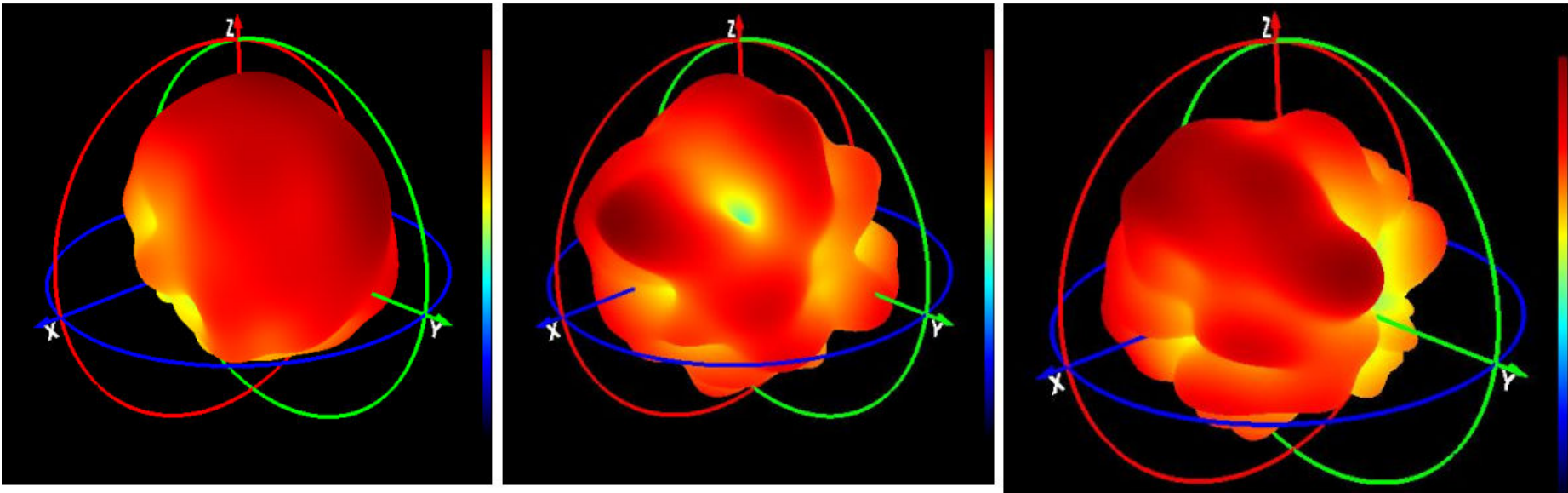
antenna#1 3D radiation pattern 2.44GHz / 5.5GHz / 7GHz

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antenna#2 3D radiation pattern 2.44GHz / 5.5GHz / 7GHz



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