



P20 BT/WIFI Ant Specification Sheet

1. Revision History

Version No.	Change Description	Version No.	Changed By
A0	Initial Version	2026-06-30	Huang Weigang
A1	Update antenna parameters	2026-07-03	Huang Fei

2. Product Application

This antenna(DF0324-W03-00) is designed for Dongfeng P20 project.

3. Environmental Parameters

Operating Temperature: -40℃~85℃

Storage Temperature: -40℃~85℃

4. Performance Specifications

Electrical Parameters				
	Ant 1 (Grey Cable)		Ant 2 (Black Cable)	
Antenna Performance	2.4G WIFI	5G	2.4G BT/WIFI	5G
Frequency Range (MHz)	2400~2500	5150~5850	2400~2500	5150~5850
Bandwidth (MHz)	100	700	100	700
Input Impedance (o)	50	50	50	50
VSWR	≤2.5	≤2.5	≤2.5	≤2.5
Gain (dBi)	3	5.2	4.2	4.6
Polarization	Linear	Linear	Linear	Linear
Radiation Efficiency	≥50%	≥50%	≥50%	≥50%

Product weight	12.43±0.2g
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5. Antenna Images



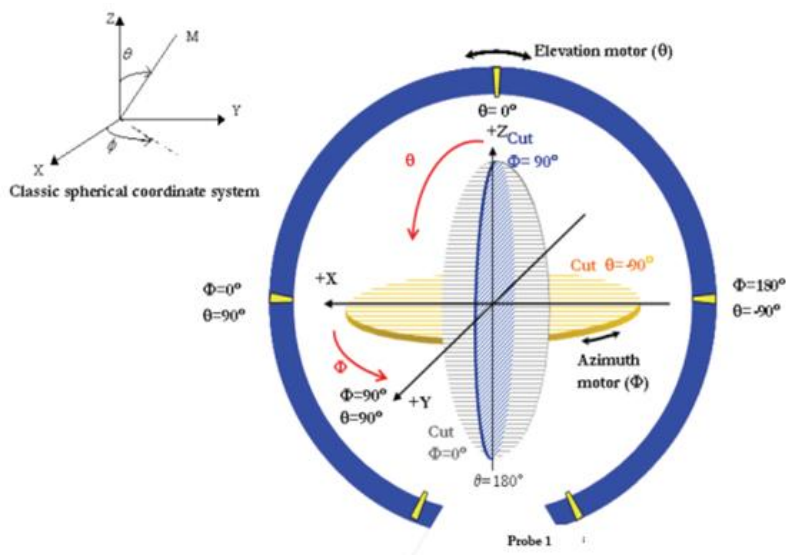
Front View



Rear View

6. Antenna Test Environment

- Antenna input characteristics were tested using an Agilent E5071C Vector Network Analyzer.
- Antenna radiation characteristics were tested in a near-field anechoic chamber.
- Test coordinate system is shown in the diagram:



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7. Antenna Performance Data-efficiency

Ant 1

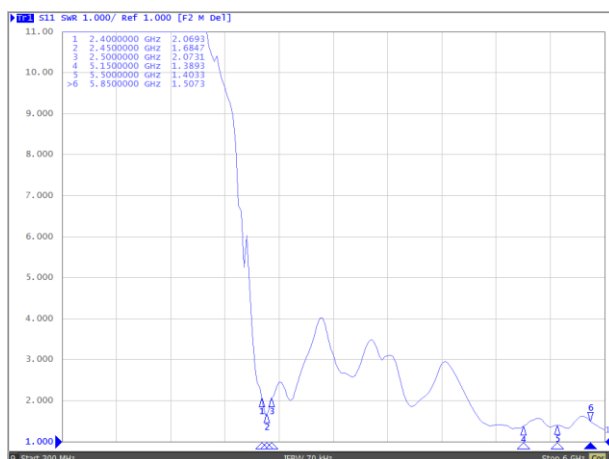
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	51.9	-2.9	1.2	5150	60.8	-2.2	4.5
2410	53.3	-2.7	1.5	5200	63.0	-2.0	4.5
2420	54.6	-2.6	1.6	5250	62.5	-2.0	4.5
2430	56.4	-2.5	1.9	5300	65.8	-1.8	4.8
2440	59.3	-2.3	1.9	5350	66.2	-1.8	4.6
2450	64.3	-1.9	2.2	5400	63.2	-2.0	4.1
2460	65.8	-1.8	2.4	5450	63.0	-2.0	3.7
2470	63.4	-2.0	2.6	5500	65.9	-1.8	4.0
2480	64.1	-1.9	3.0	5550	66.4	-1.8	4.3
2490	62.2	-2.1	3.0	5600	59.2	-2.3	4.3
2500	59.8	-2.2	3.0	5650	57.3	-2.4	4.6
AVE	59.6	-2.3	2.2	5700	57.8	-2.4	4.9
				5750	59.4	-2.3	5.2
				5800	51.3	-2.9	4.6
				5850	57.5	-2.4	5.2
				AVE	61.3	-2.1	4.5

Ant 2

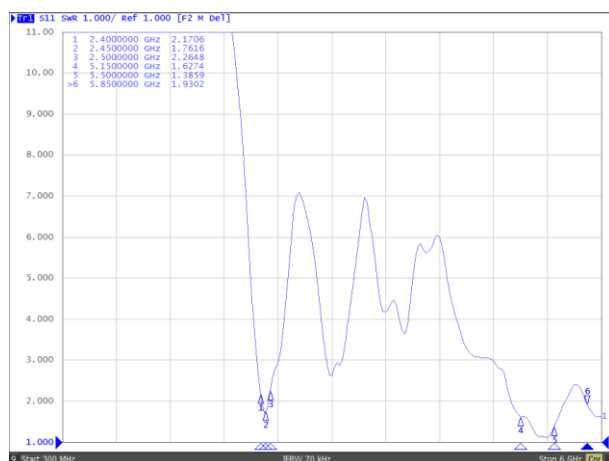
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	46.6	-3.3	2.5	5150	61.4	-2.1	3.1
2410	49.7	-3.0	3.0	5200	63.1	-2.0	2.7
2420	50.2	-3.0	3.1	5250	63.8	-2.0	3.2
2430	51.4	-2.9	3.4	5300	71.9	-1.4	4.6
2440	55.3	-2.6	3.5	5350	73.3	-1.4	4.6
2450	59.6	-2.3	3.8	5400	66.4	-1.8	3.4
2460	61.1	-2.1	4.2	5450	63.2	-2.0	2.9
2470	59.6	-2.3	3.5	5500	63.7	-2.0	2.8
2480	61.2	-2.1	3.6	5550	60.7	-2.2	2.6
2490	60.8	-2.2	3.6	5600	54.4	-2.6	2.3
2500	60.1	-2.2	3.6	5650	53.0	-2.8	2.4
AVE	56.0	-2.5	3.4	5700	56.6	-2.5	2.6
				5750	58.6	-2.3	2.8
				5800	47.0	-3.3	1.4
				5850	54.5	-2.6	1.9
				AVE	60.8	-2.2	2.9

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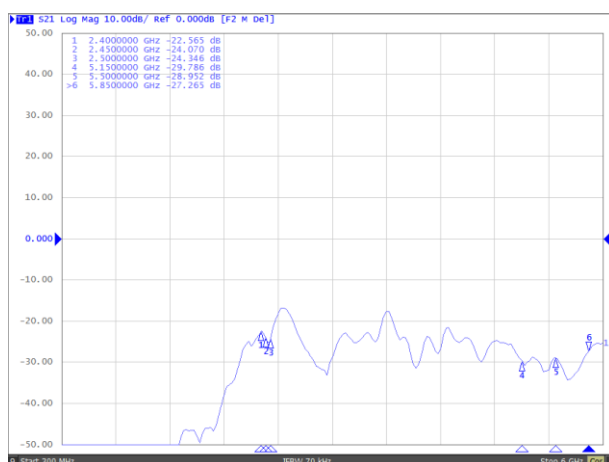
8. Antenna Performance Data_VSWR&Isolation



Ant 1



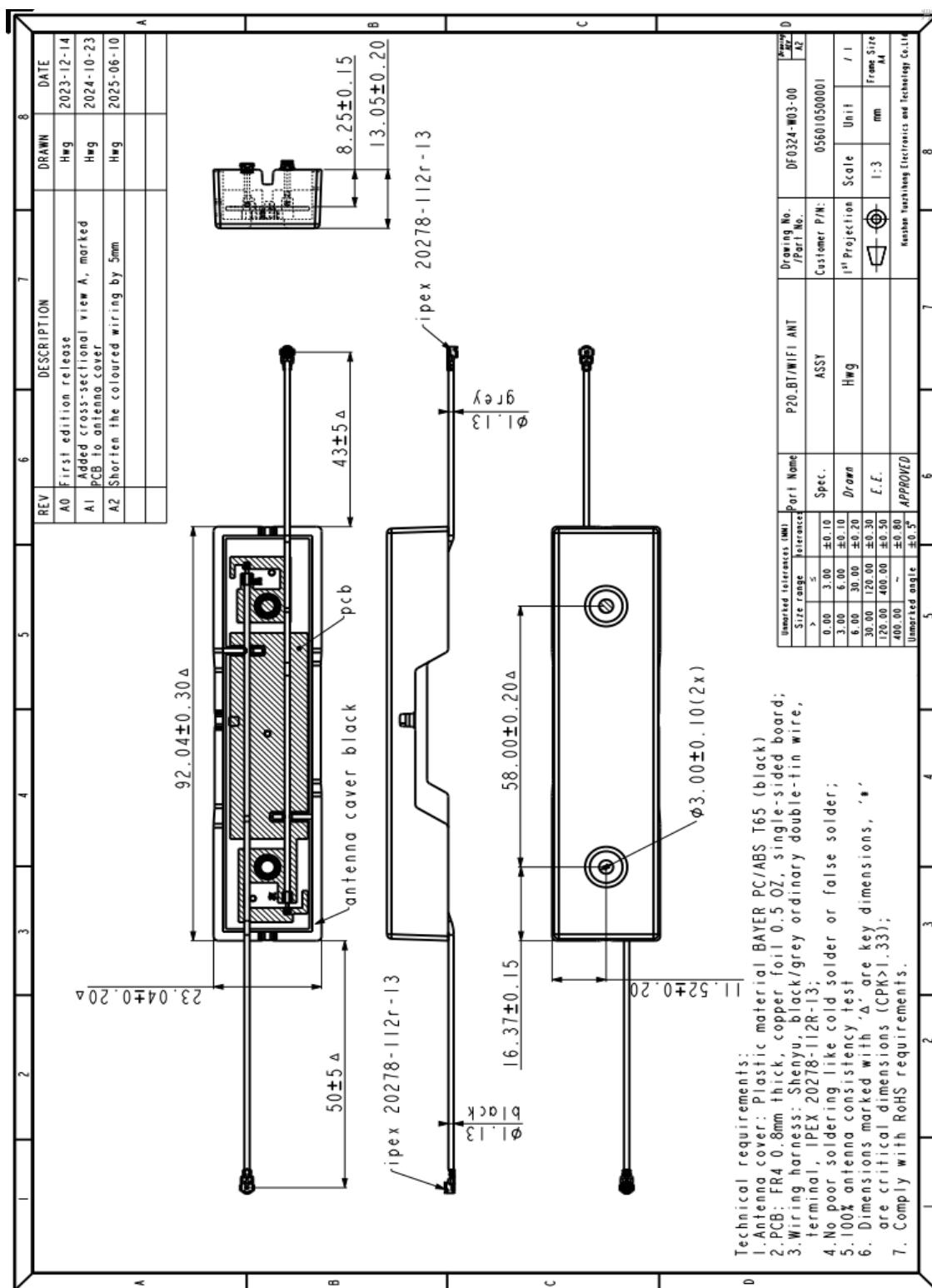
Ant 2



Isolation Ant 1&Ant 2

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9. Antenna Drawing Specifications



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