

1.Antenna Specification

Type	Inverted F antenna
Construction	PCB Antenna
Name and address of the antenna manufacturer	Name : DFree Inc. Address : 2-10-9,Akasaka,Minato-ku,Tokyo, Japan
Model number of the antenna	DIFA-1404

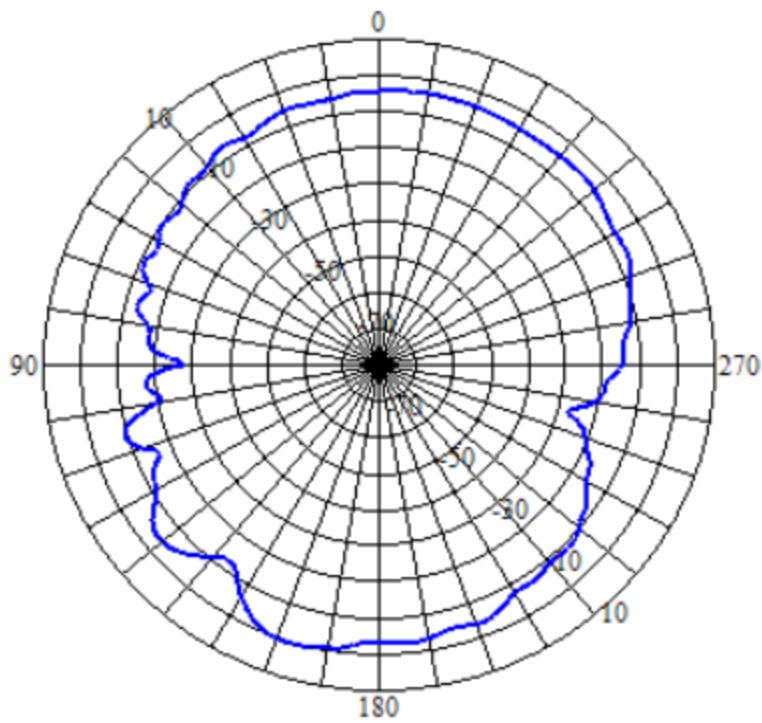
2.Antenna Gain

Folder	Frequency(MHz)	File Name	Location	H/V			
test data for DU2P-BL-A1	2402	Test01	X	H	Hori. MAX -0.7 MIN -20.3 AVE -5.3 [dBi]		
				V	Vert. MAX -9.1 MIN -39.5 AVE -16.8 [dBi]		
		Test02	Y	H	Hori. MAX 0.5 MIN -28.0 AVE -6.2 [dBi]	Mamimum gain	
				V	Vert. MAX -6.4 MIN -29.8 AVE -10.4 [dBi]		
		Test03	Z	H	Hori. MAX -1.9 MIN -37.9 AVE -9.5 [dBi]		
				V	Vert. MAX -0.1 MIN -6.1 AVE -3.2 [dBi]		
	2440	Test04	X	H	Hori. MAX -1.0 MIN -20.2 AVE -5.9 [dBi]		
				V	Vert. MAX -9.6 MIN -29.2 AVE -15.4 [dBi]		
		Test05	Y	H	Hori. MAX -1.2 MIN -29.2 AVE -6.3 [dBi]		
				V	Vert. MAX -6.7 MIN -25.4 AVE -10.3 [dBi]		
		Test06	Z	H	Hori. MAX -2.8 MIN -32.9 AVE -9.9 [dBi]		
				V	Vert. MAX -0.8 MIN -6.5 AVE -3.5 [dBi]		
	2480	Test07	X	H	Hori. MAX -1.7 MIN -15.5 AVE -6.6 [dBi]		
				V	Vert. MAX -8.2 MIN -42.9 AVE -15.9 [dBi]		
		Test08	Y	H	Hori. MAX -1.8 MIN -38.0 AVE -6.6 [dBi]		
				V	Vert. MAX -7.8 MIN -18.4 AVE -11.7 [dBi]		
		Test09	Z	H	Hori. MAX -4.6 MIN -27.8 AVE -10.2 [dBi]		
				V	Vert. MAX -1.5 MIN -7.5 AVE -4.1 [dBi]		

Measured by SGS Japan on 2025/01/14.

3.Antenna Pattern

[Test 02]



4. Antenna Measurement setup

SGS

Test Set up

DUT





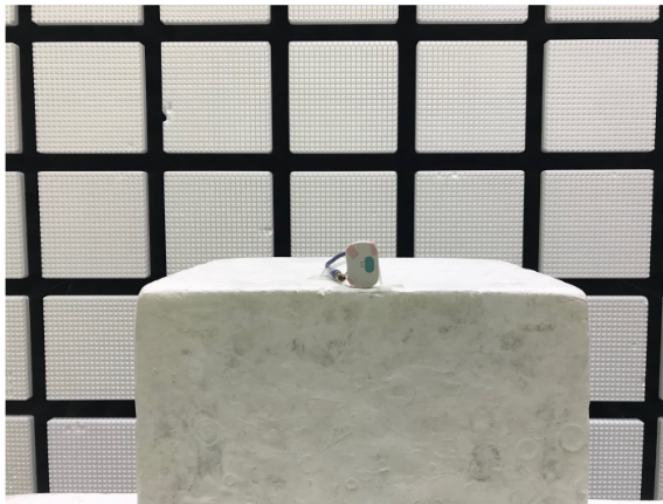
X-plane



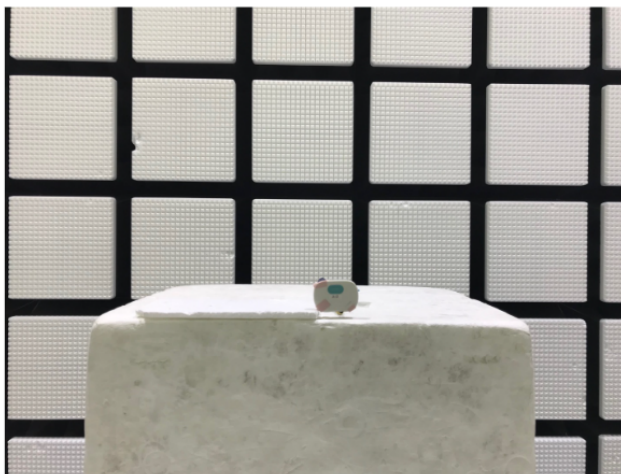
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Y-plane



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5.List of utilized test equipment

ID No.	Kind of Equipment	Manufacturer	Model No.	Serial Number	Cal. Date	Cal. until
AC11(EM)	Anechoic Chamber	TDK	-	-	2024/8/1	2025/8/31
DH07	DRG Horn Antenna	A.H. Systems	SAS-571	1939	2024/2/8	2026/2/28
CL80	RF Cable	HUBER&SUHNER	SUCOFLEX104PE	MY3792/4PE	2024/2/16	2025/2/28
TR09	Test Receiver (F/W : 4.43 SP3)	Rohde & Schwarz	ESU8	100386	2024/9/12	2025/9/30
SG12	Signal Generator (F/W : A.01.87)	Agilent Technologies	N5181A	MY47420362	2024/6/4	2025/6/30

SGS Japan

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