



REPORT No.: SZ26010416E01

TEST REPORT

APPLICANT : NormaTec Industries, LP

PRODUCT NAME : NT Elite Heat Antennas

MODEL NAME : NTPRO-BT, NTPRO-433

TRADE NAME : N/A

BRAND NAME : N/A

STANDARD(S) : IEEE Std 149-2021

RECEIPT DATE : 2026-01-27

TEST DATE : 2026-01-28

ISSUE DATE : 2026-03-27

Edited by:

Guo Penghua(Rapporteur)

Approved by:

Chi Shide(Supervisor)

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MORLAB

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Change History		
Version	Date	Reason for change
1.0	2026-03-27	First edition

Note: the latest revision of the report supersedes all previous version.

1. Technical Information

Note: Provide by applicant.

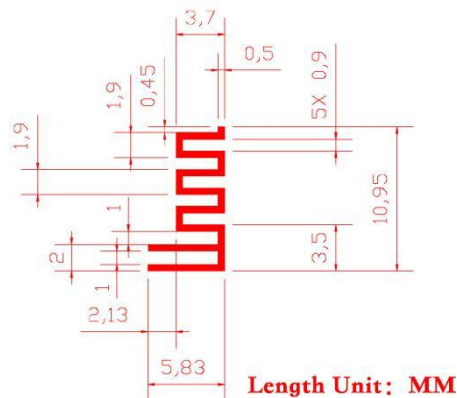
1.1. Applicant and Manufacturer Information

Applicant:	NormaTec Industries, LP
Applicant Address:	480 Pleasant St. Watertown, MA 02472, USA
Manufacturer:	Ryder Electronics (Xinfeng) Ltd.
Manufacturer Address:	Shuidong Ave(E), Xinfeng Industrial Park, Xinfeng County, Ganzhou City, Jiangxi Province, China

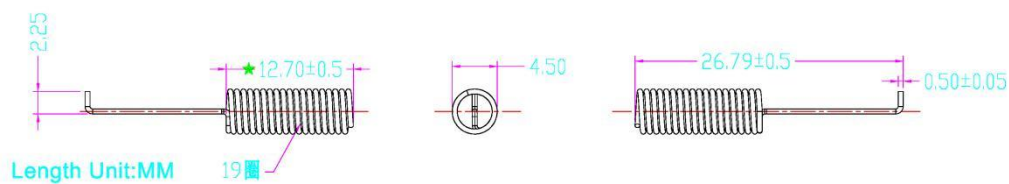
1.2. Equipment Under Test (EUT) Description

Wireless Type	N/A
Antenna Type	NTPRO-BT: PCB antenna, NTPRO-433: Helical antenna
Frequency	NTPRO-BT: 2400MHz-2500MHz, NTPRO-433: 433.92MHz
Serial Number	N/A
Sample No.	1#, 2#

Dimensions:



NTPRO-BT



NTPRO-433

2. Test Results

2.1. Applied Reference Documents

Leading reference documents for testing:

No.	Identity	Document Title
1	IEEE Std 149-2021	IEEE Recommended Practice for Antenna Measurements

Notes: Any additions, deviation, or exclusions from the method shall be noted in the "Remark".

2.2. Test Conditions

Test Environment Conditions:

Relative Humidity(%):	25 - 75
Temperature(°C):	10 - 30

2.3. Measurement Uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.



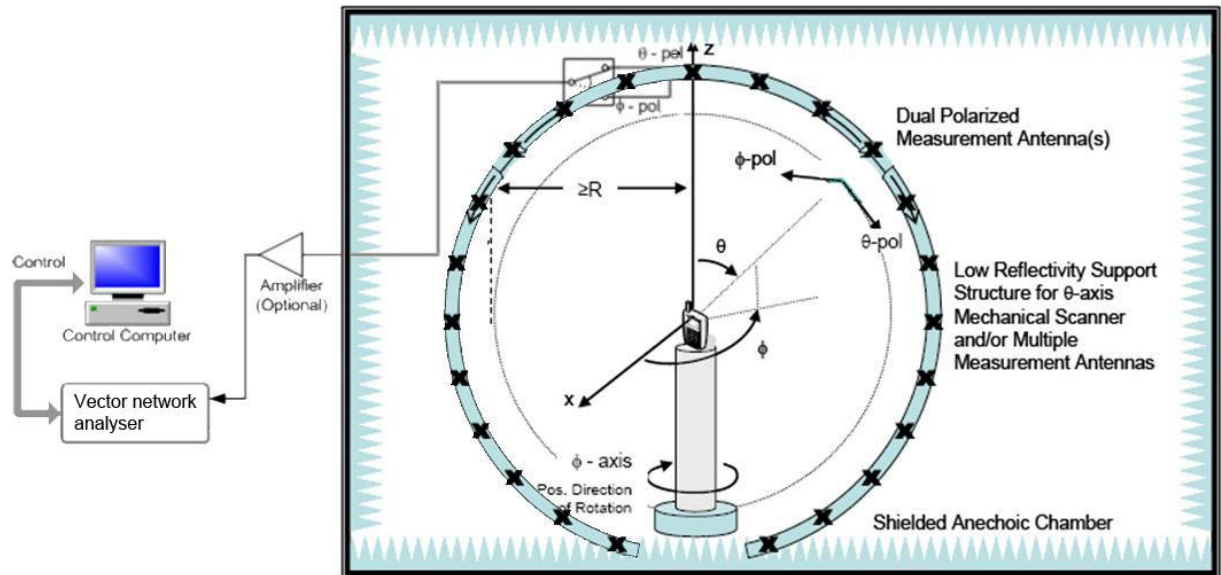
2.4. Test Results lists

2.4.1. Gain

NTPRO-BT	
Frequency(MHz)	Gain(dBi)
2400	-0.96
2410	-0.97
2420	-1.06
2430	-1.33
2440	-1.69
2450	-1.78
2460	-1.56
2470	-1.49
2480	-1.43
2490	-1.53
2500	-1.58

NTPRO-433	
Frequency(MHz)	Gain(dBi)
433	-3.58
433.92	-3.43
434	-3.52

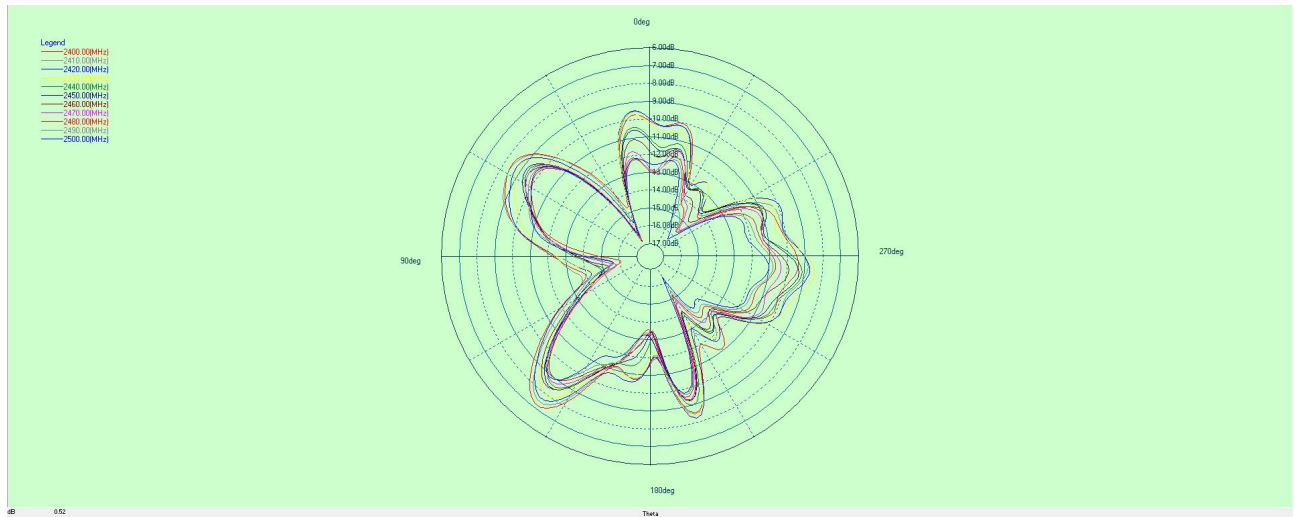
Annex A Test Setup Photos



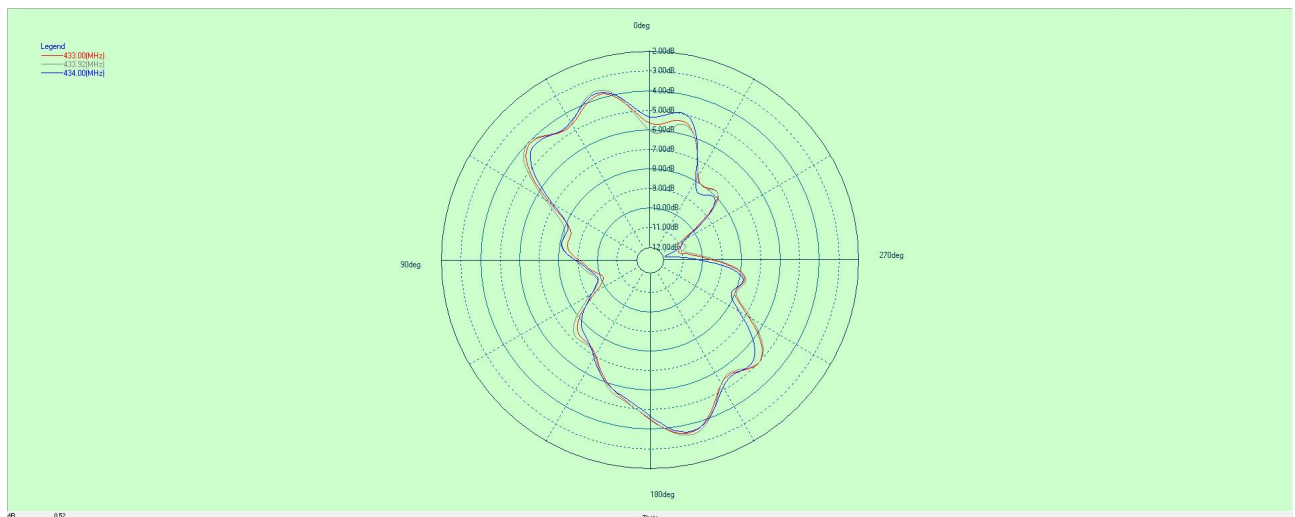
Annex B Figures

1. 2D Radiation Pattern

Phi=0°



NTPRO-BT

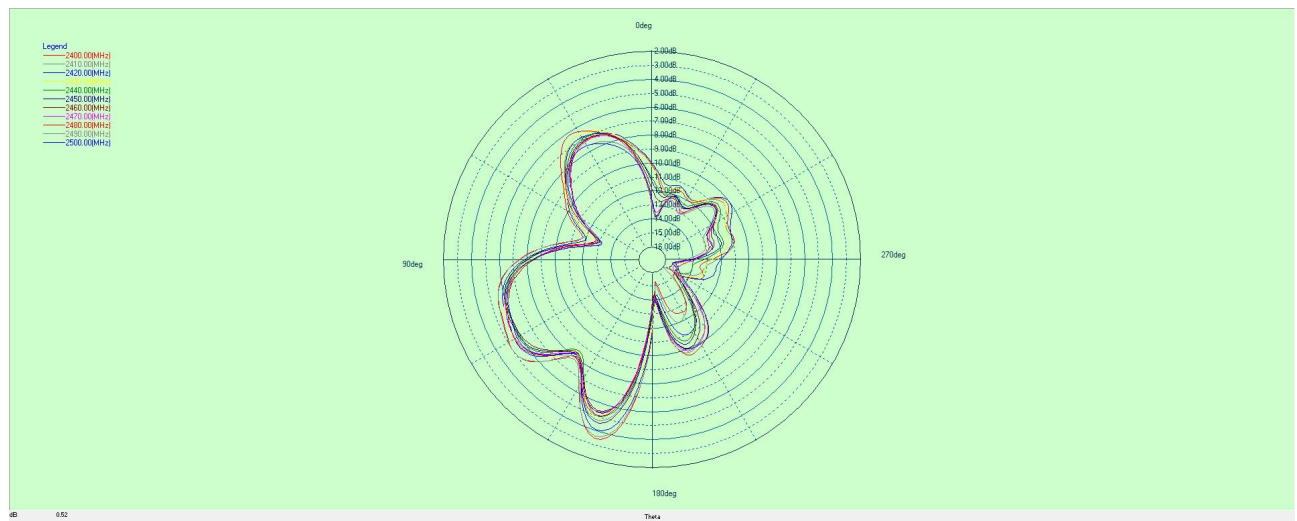


NTPRO-433

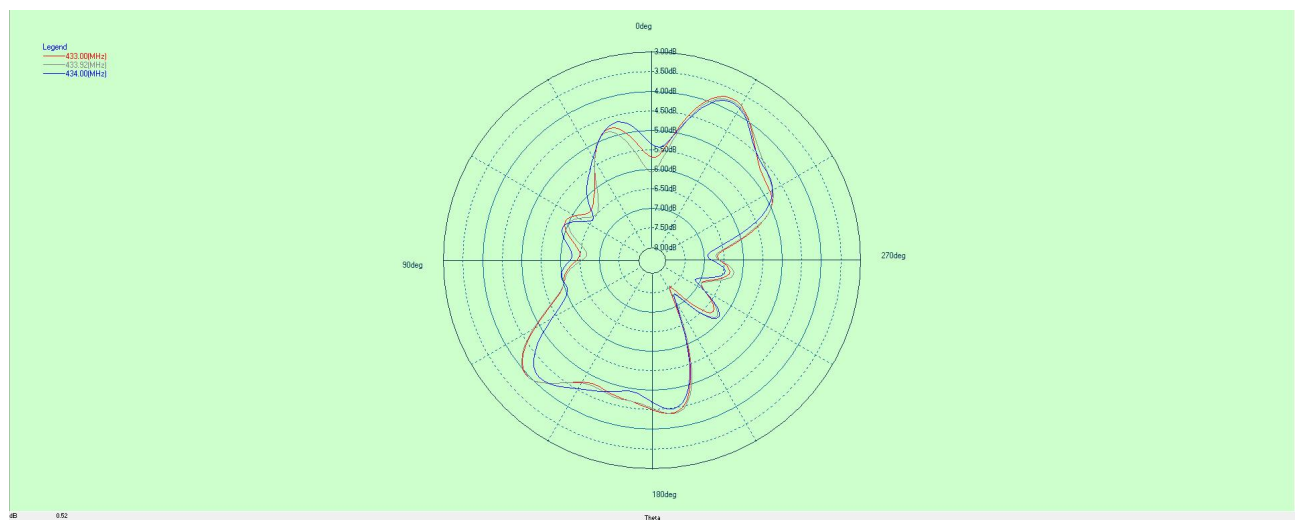


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Phi=90°



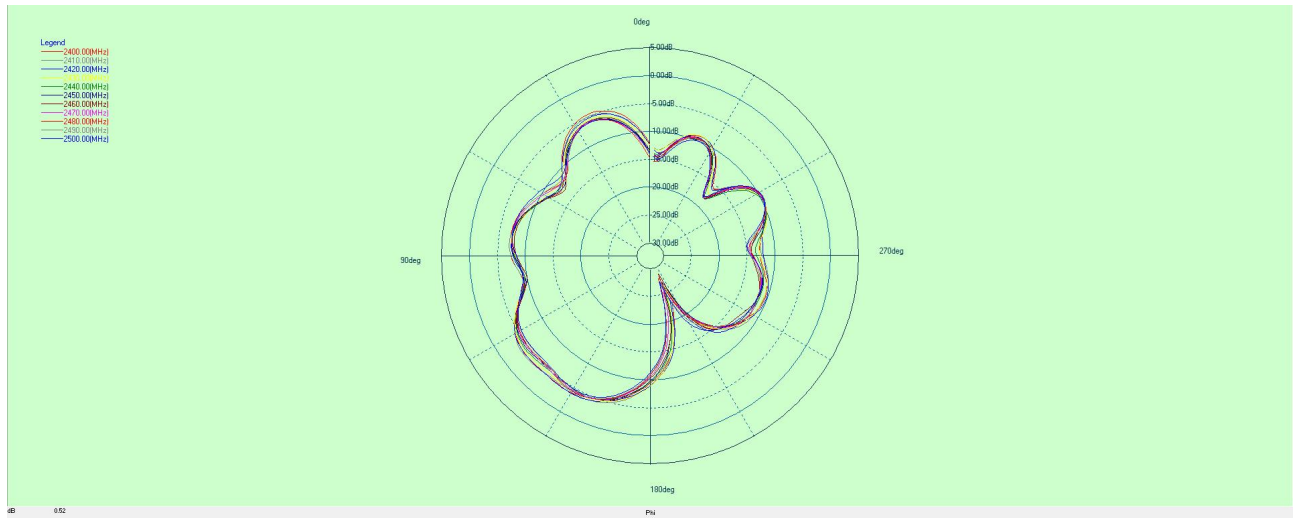
NTPRO-BT



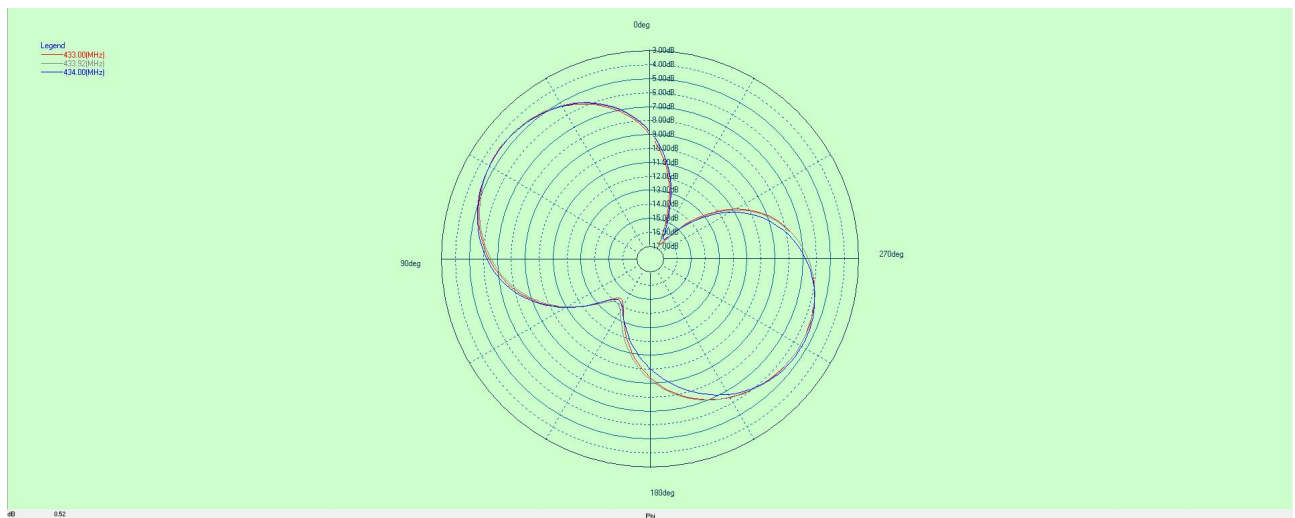
NTPRO-433



Theta=90°

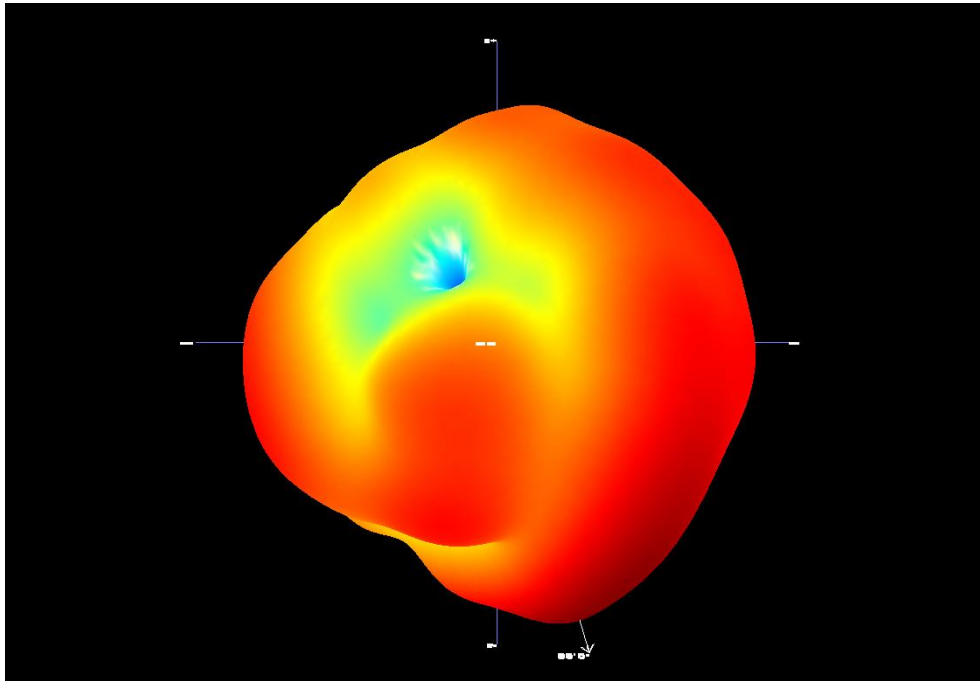


NTPRO-BT

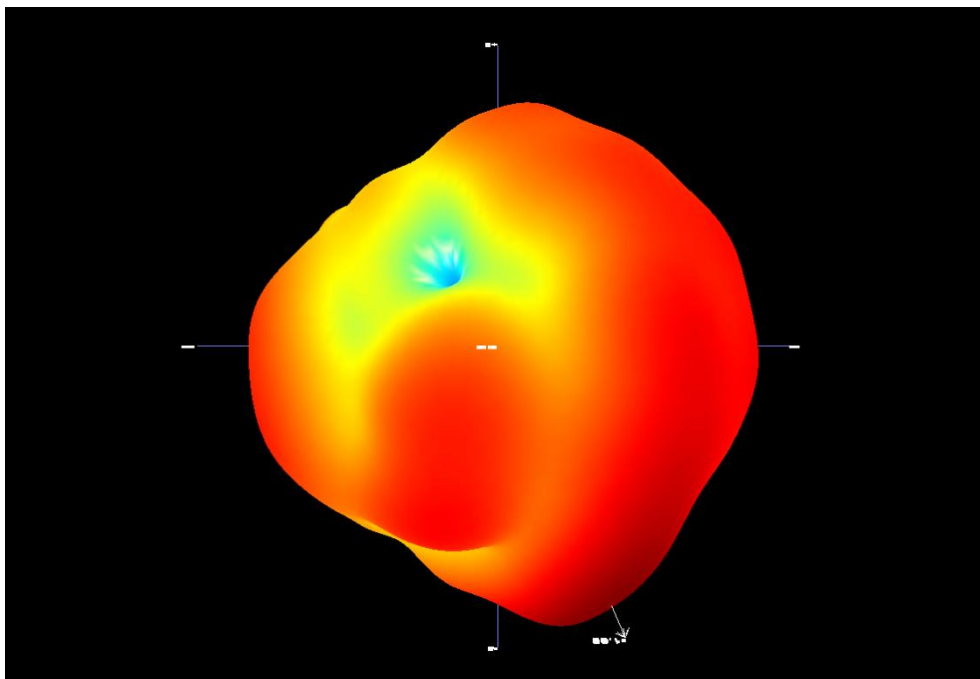


NTPRO-433

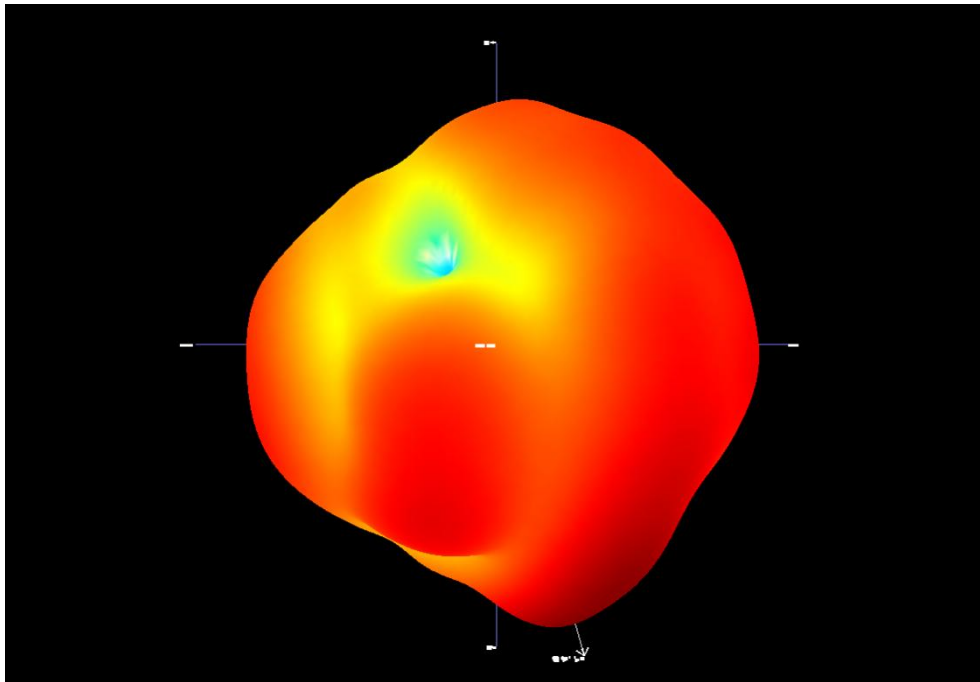
2. 3D Radiation Pattern



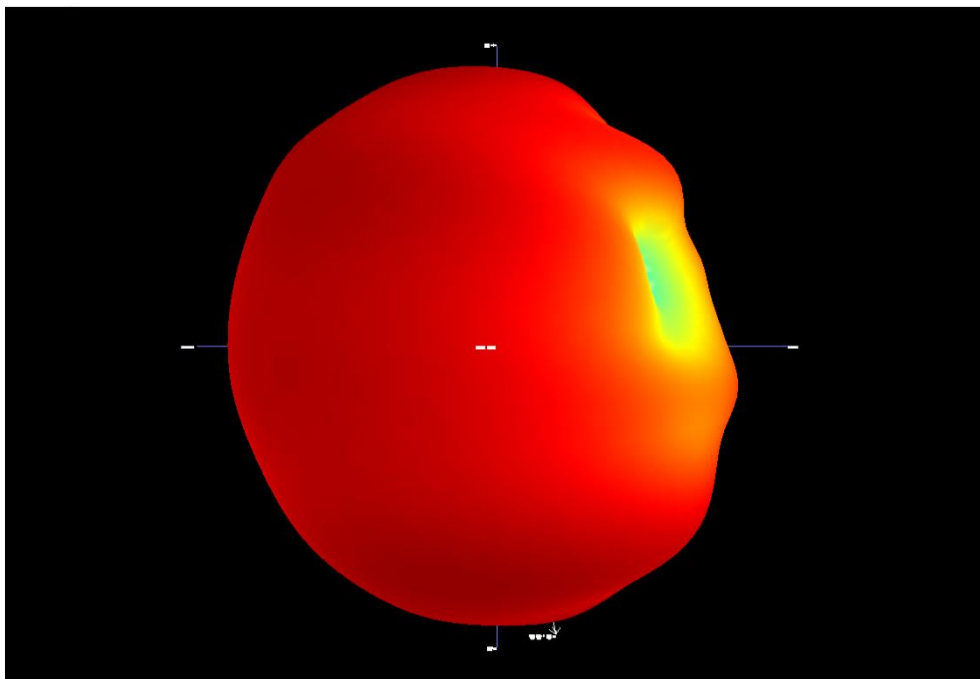
2400MHz_NTPRO-BT



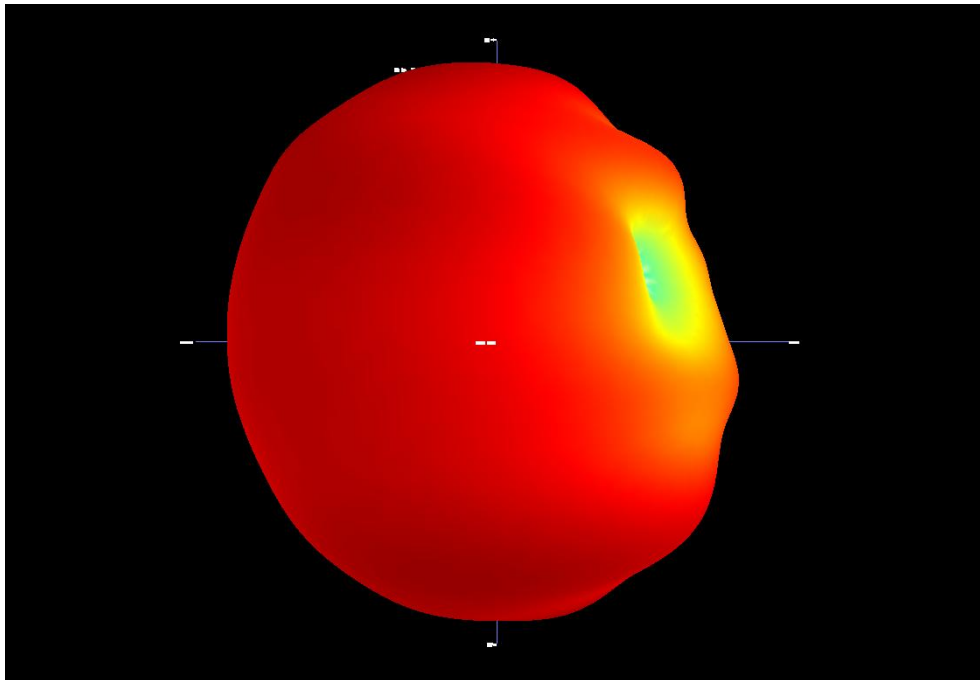
2440MHz_NTPRO-BT



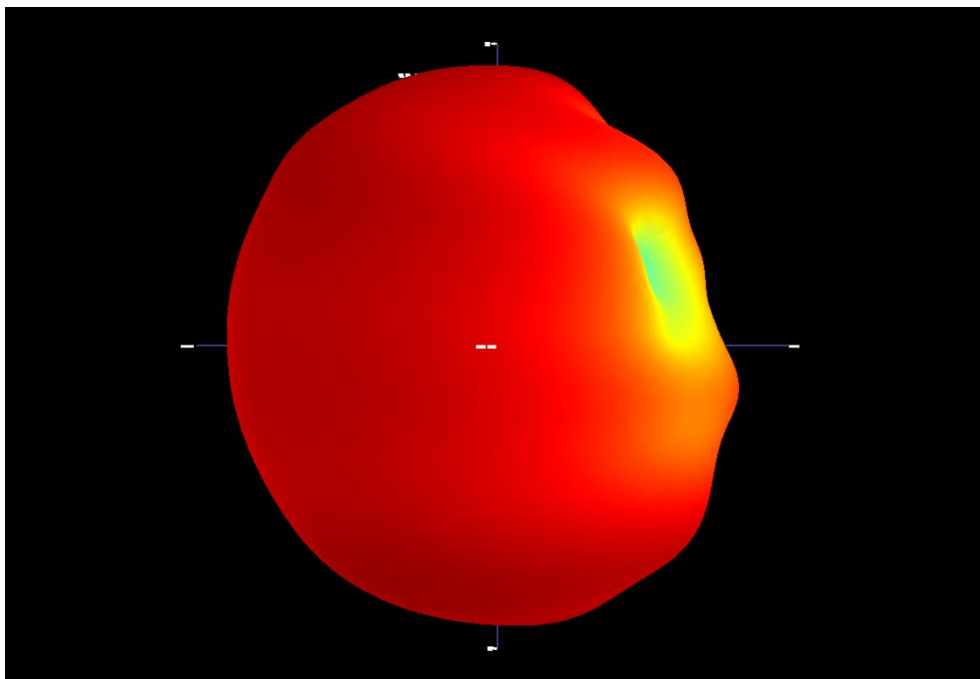
2480MHz_NTPRO-BT



433MHz_NTPRO-433



433.92MHz_NTPRO-433



434MHz_NTPRO-433



Annex D Testing Laboratory Information

1. Identification of the Responsible Testing Laboratory

Laboratory Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Laboratory Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China
Telephone:	+86 755 36698555
Facsimile:	+86 755 36698525

2. Identification of the Responsible Testing Location

Name:	Shenzhen Morlab Communications Technology Co., Ltd.
Address:	FL.1-3, Building A, FeiYang Science Park, No.8 LongChang Road, Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China

3. Test Equipment Utilized

3.1 Test Equipments

No.	Equipment Name	Serial No.	Type	Manufacturer	Cal.Date	Cal.Due Date
1	Vector Network Analyzer	MY46214666	E5071C	Agilent	2025.12.24	2026.12.23
2	OTA Chamber	N/A	SG24	Satimo	2025.01.11	2028.01.10

3.2 Test Software

No.	Software Name	Serial No.	Version	Manufacturer
1	SatEnv	N/A	2.0.1.5 build 12	Satimo
2	SPM	N/A	1.11	Satimo



Notes

1. The report shall have report stamp or our company stamp.
2. The report shall be invalid without all the signatures of the editor and approver.
3. The report shall not be changed.
4. Any objections must be raised to Morlab within 15 days since the date when the report is received. It will not be taken into consideration beyond this limit.
5. Conformity declaration:
 - ☒ Morlab issues a statement of conformity based on the corresponding standards (default)
 - ☐ Morlab issues a statement of conformity based on the applicant requirement
6. Use of uncertainty of measurement for decisions on conformity (decision rule):

No decision rule is specified by the testing standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule).

————— END OF REPORT —————