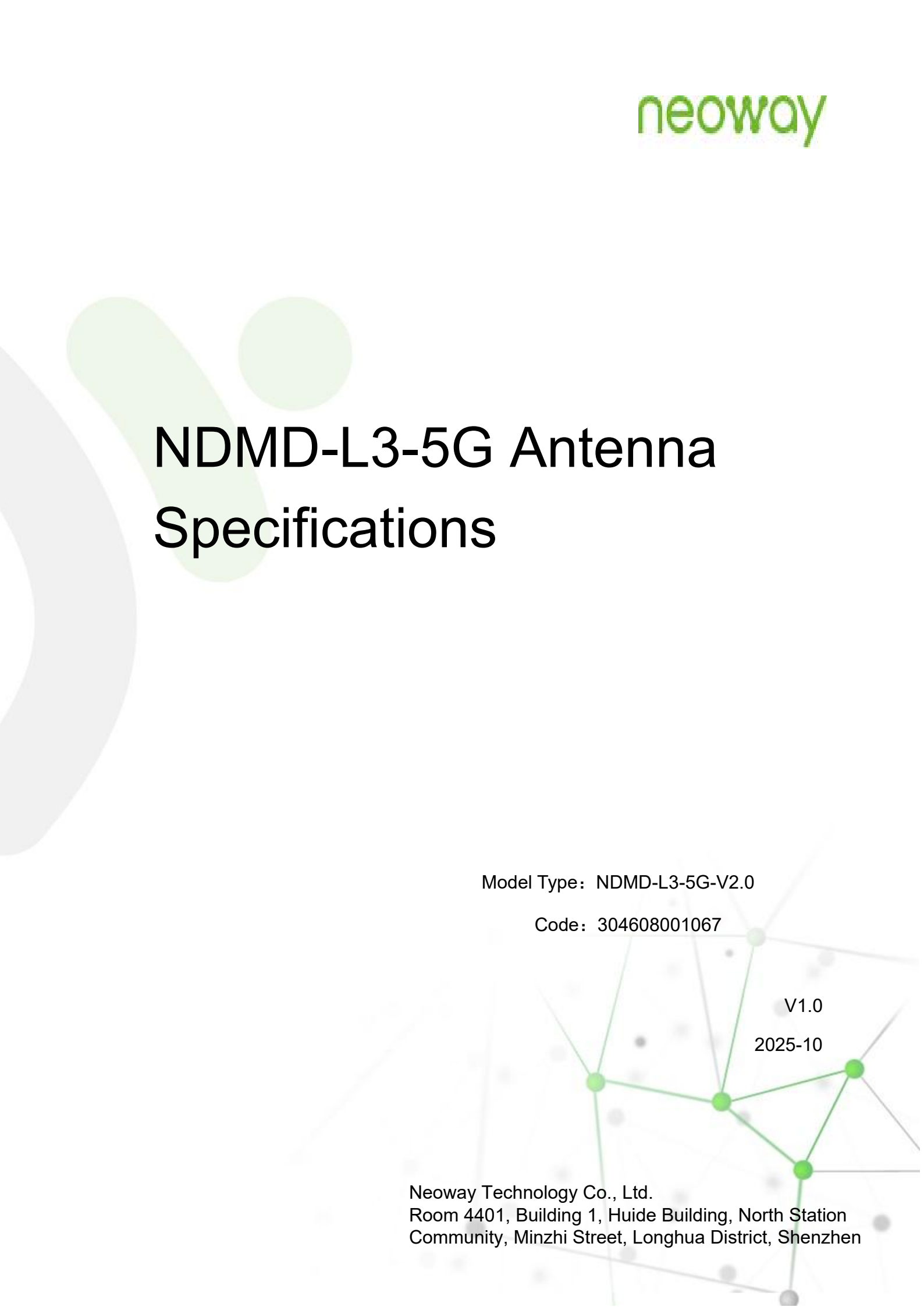


The background features abstract green and grey shapes on the left side and a faint network diagram with green nodes and lines on the right side.

NDMD-L3-5G Antenna Specifications

Model Type: NDMD-L3-5G-V2.0

Code: 304608001067

V1.0

2025-10

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Notice

This document is intended for system engineers (SEs), development engineers, and test engineers.

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About This Document

Scope

This document is applicable to NDMD-L3-5G Antenna.

Audience

This document is intended for system engineers (SEs), development engineers, and test engineers.

Change History

Issue	Date	Change	Changed By
1.0	2022-03	Initial draft	Yang Pin

Conventions

Symbol	Indication
	Indicates danger or warning. This information must be followed. Otherwise, a catastrophic module or user device failure or bodily injury may occur.
	Indicates caution. This symbol alerts the user to important points about using the module. If these points are not followed, the module or user device may fail.
	Indicates instructions or tips. This symbol provides advices or suggestions that may be useful when using the module.

1 Antenna picture

picture



2 Product Specifications

Name	NDMD-L3-5G Antenna	Model Type	NDMD-L3-5G-V2.0
Frequency Range	5150-5850MHz	Dimensions	PCB: 21.0*10.8*1.6mm
VSWR	≤ 2.5	Radome Color	PCB: Green Cable: Black
Efficiency	$\geq 35\%$	Cable	120mm, $\varnothing 1.13\text{mm}$
Impedance	$50\ \Omega$	Working Temperature	-40℃ - +85℃
Polarization	Linearly polarized	Materials	PCB+CABLE
Radiation	Omnidirectional antenna		

3 Product Features

- The full-band efficiency is guaranteed, and the average efficiency of the full-band is $>35\%$, which ensures the radiation performance.
- A professional microwave darkroom is used to test the passive efficiency performance of the whole machine to ensure the passive efficiency index and ensure the normal communication function in actual use.

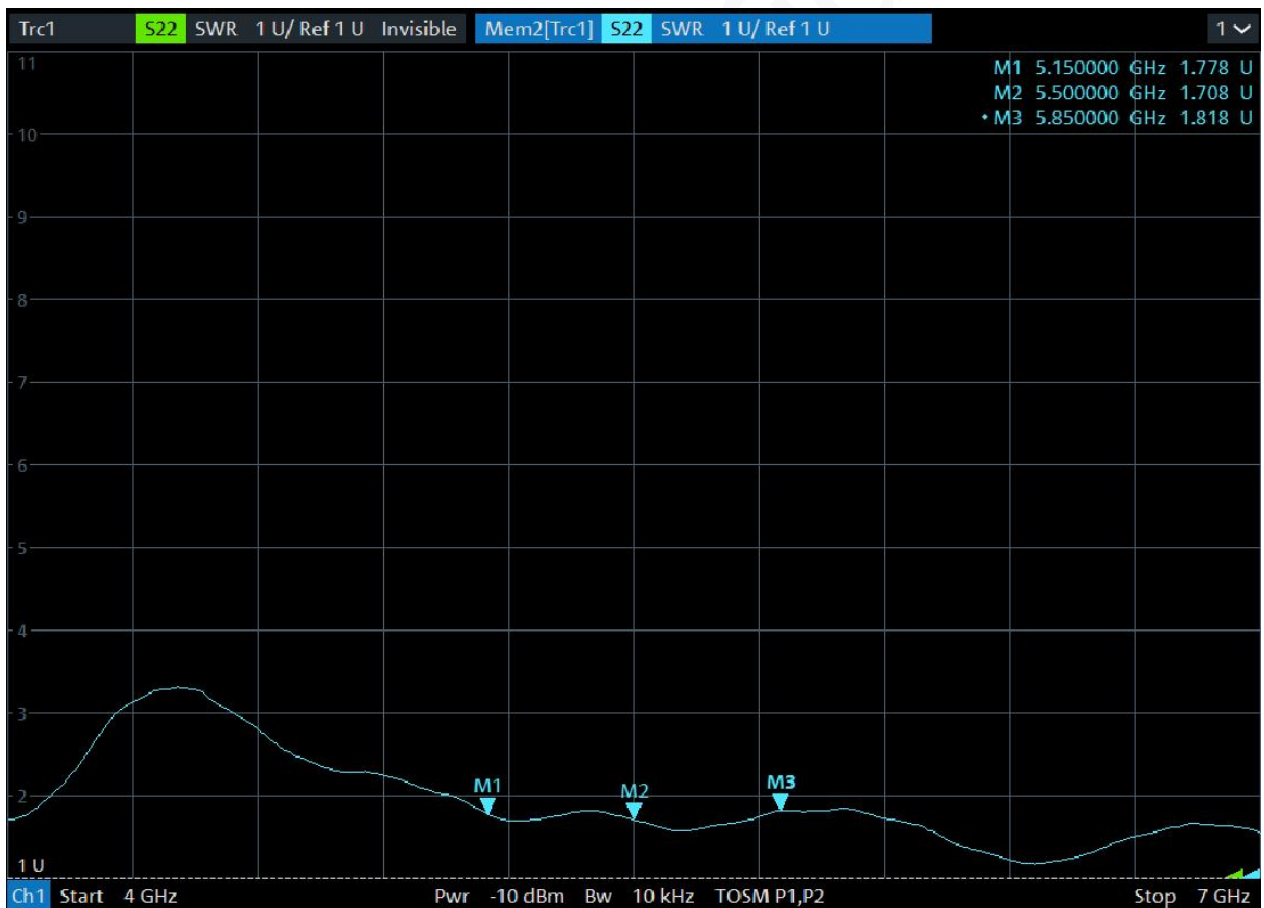
Neoway Confidential

4 Antenna Passive Performance

4.1 VSWR

Frequency (MHz)	5150	5500	5850
VSWR	1.778	1.708	1.818

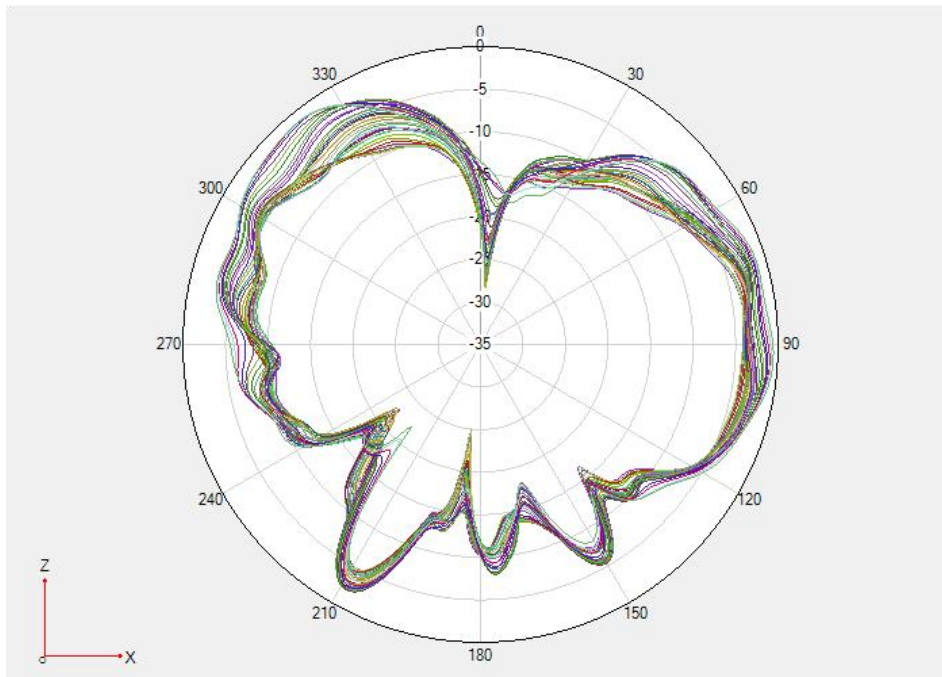
4.2 S11



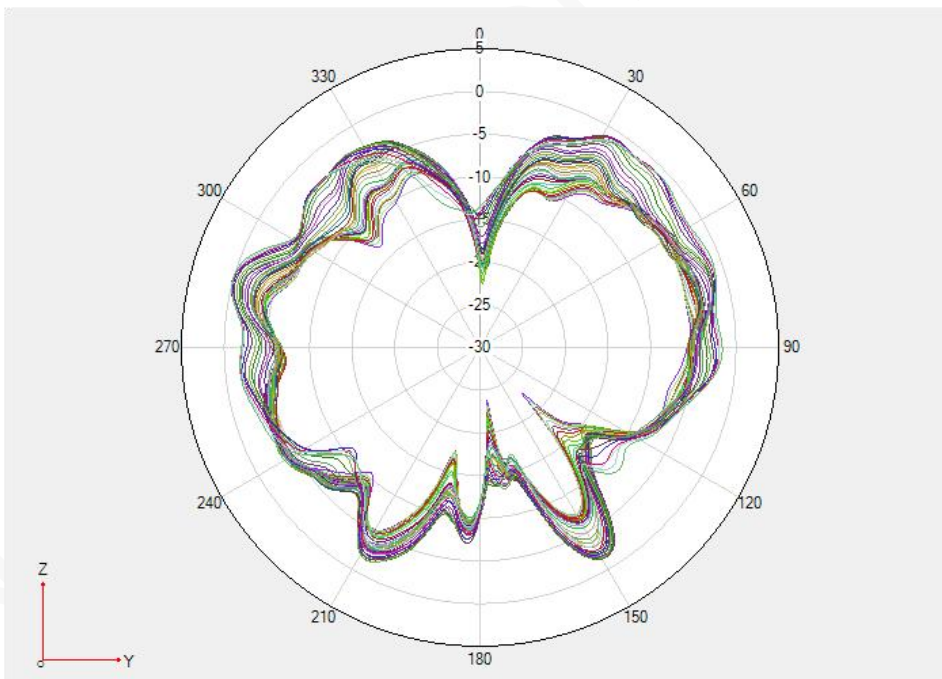
4.3 Gain and Efficiency

Frequency/Mhz	Efficiency / dB	Efficiency / %	Gain/dBi
5150	-3.55	44.16	1.98
5170	-3.34	46.34	2.04
5190	-3.26	47.21	2.03
5210	-3.44	45.29	1.88
5230	-3.17	48.19	1.92
5250	-3.28	46.99	2.44
5270	-3.04	49.66	2.74
5290	-2.86	51.76	2.81
5310	-3.05	49.55	2.2
5330	-2.87	51.64	2.17
5350	-2.96	50.58	2.79
5370	-2.76	52.97	2.84
5390	-2.64	54.45	2.51
5410	-2.69	53.83	2.69
5430	-2.36	58.08	3.16
5450	-2.67	54.08	2.78
5470	-2.64	54.45	2.64
5490	-2.4	57.54	2.85
5510	-2.35	58.21	3.14
5530	-2.01	62.95	3.48
5550	-2.36	58.08	3.28
5570	-2.29	59.02	3.03
5590	-2.03	62.66	3.01
5610	-2.21	60.12	3.49
5630	-2.2	60.26	3.12
5650	-2.61	54.83	2.81
5670	-2.29	59.02	2.82
5690	-2.42	57.28	2.62
5710	-2.03	62.66	2.53
5730	-2.25	59.57	2.33
5750	-2.55	55.59	2.45
5770	-2.51	56.1	2.68
5790	-2.47	56.62	2.64
5810	-2.53	55.85	2.53
5830	-2.73	53.33	2.45
5850	-2.81	52.36	2.16

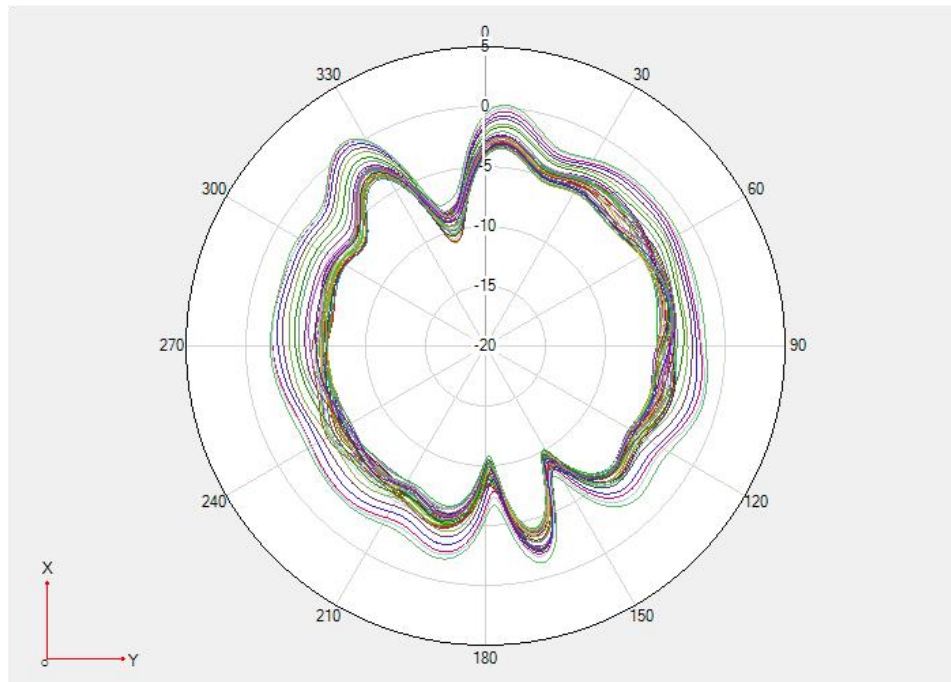
4.4 Radiation Patterns



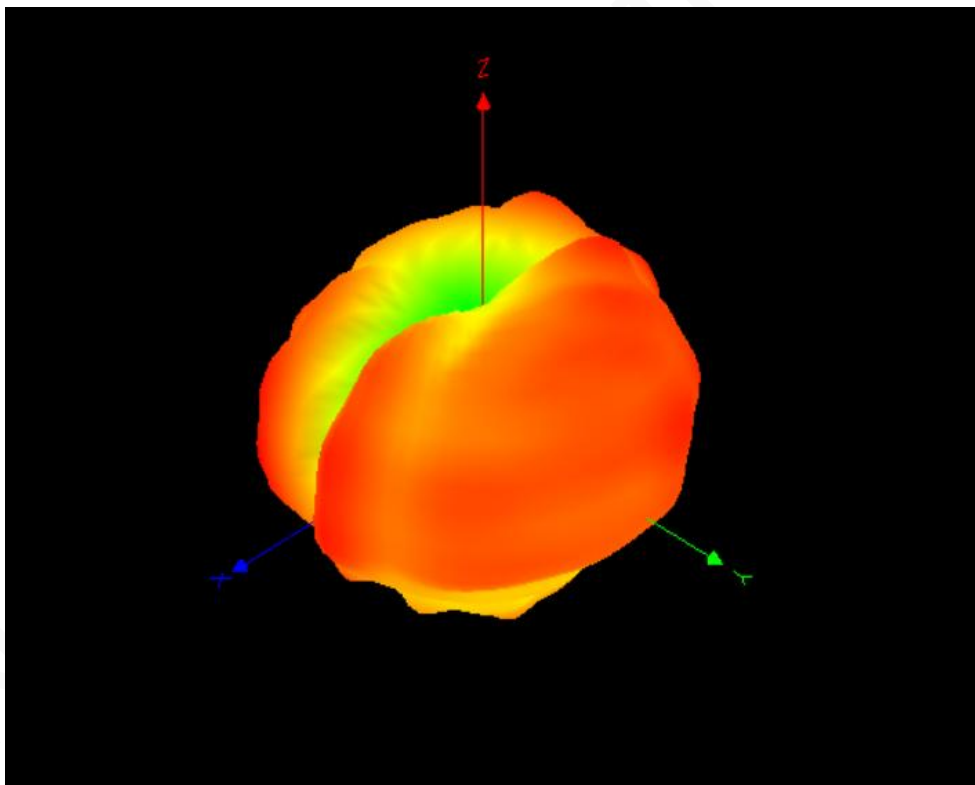
Phi 0 2D



Phi 90 2D



Theta 90 2D



3D Etotal

5 Antenna Drawing

