

OTA Antenna Performance Data Summary

APPLICANT : M5Stack Technology Co., Ltd
EQUIPMENT : M5NanoC6
BRAND NAME : M5Stack
MODEL NAME : NanoC6
ANTENNA TYPE : Multilayer Antenna
DEVICE RECEIVING DATE : Nov. 16, 2023
TEST DATE : Nov. 17, 2023

Tested by:

Jinshan Zheng / Senior Engineer

Reviewed by:

Johnny Chen / Manager

Sporton International Inc. (Shenzhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China



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1. Administration Data

1.1 Testing Laboratory

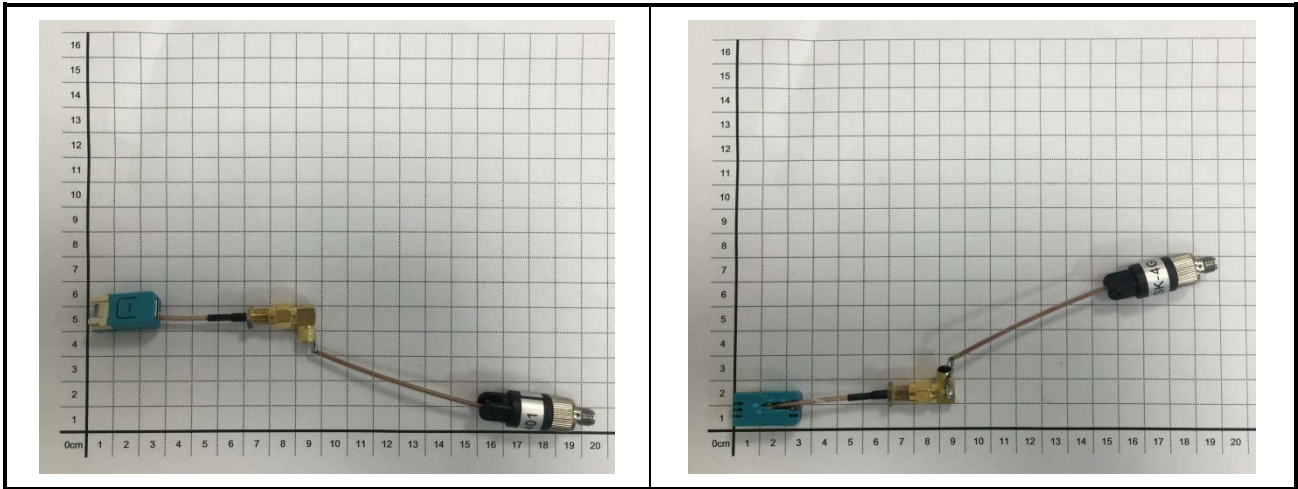
Test Site	Sporton International Inc. (Shenzhen)
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055, People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595
Chamber	<input type="checkbox"/> OTA01-SZ <input checked="" type="checkbox"/> OTA02-SZ <input type="checkbox"/> OTA03-SZ

■: Indicates the chamber(s) used in this data summary.

1.2 Applicant

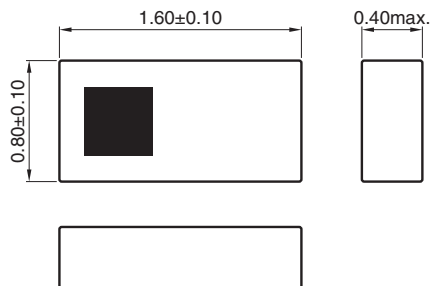
Company Name	M5Stack Technology Co., Ltd
Address	5F, Tangwei Stock Commercial Building Youli Road, Bao'an District, Shenzhen, Guangdong, China

2. Product Photo

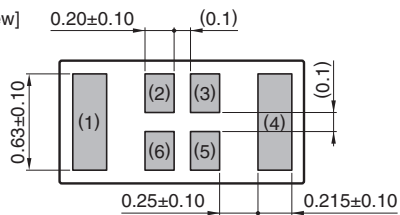


SHAPES AND DIMENSIONS

[Top view]



[Bottom view]



Terminal functions

1	Radiator electrode
2	Dummy pad
3	Dummy pad
4	Feed point
5	Dummy pad
6	Dummy pad

Dimensions in mm

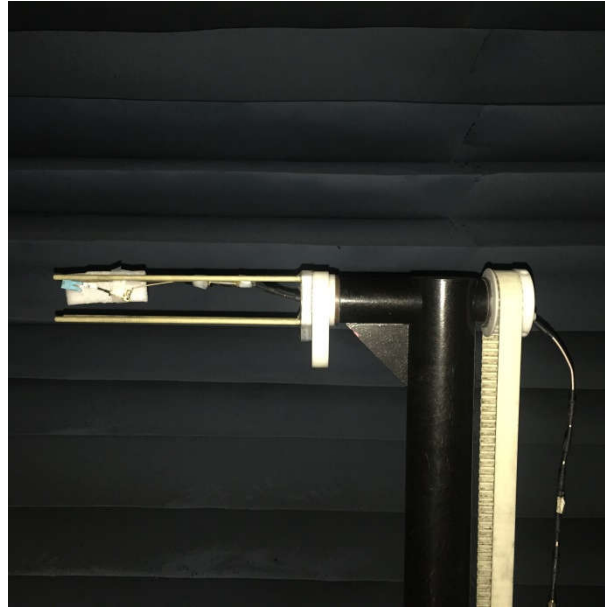


3. Summary of Test Result of Antenna Gain

Test / Position	Antenna Gain / Free Space										
	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Frequency (MHz)											
Directivity (dBi)	6.38	6.19	5.89	5.68	5.54	5.24	5.16	5.09	5.12	4.98	5.18
Avg Gain(dBi)	-12.88	-12.32	-12.01	-12.02	-11.84	-11.82	-11.74	-11.91	-12.21	-12.43	-12.76
Efficiency (%)	5.16	5.86	6.30	6.28	6.55	6.57	6.71	6.44	6.02	5.72	5.29
Peak Gain(dBi)	-6.50	-6.13	-6.11	-6.35	-6.29	-6.59	-6.58	-6.83	-7.09	-7.45	-7.58

4. Description for EUT Testing Position

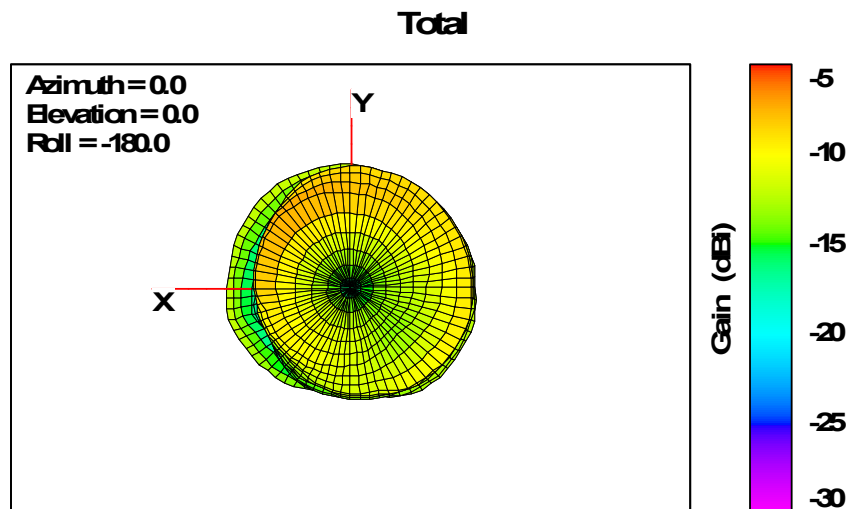
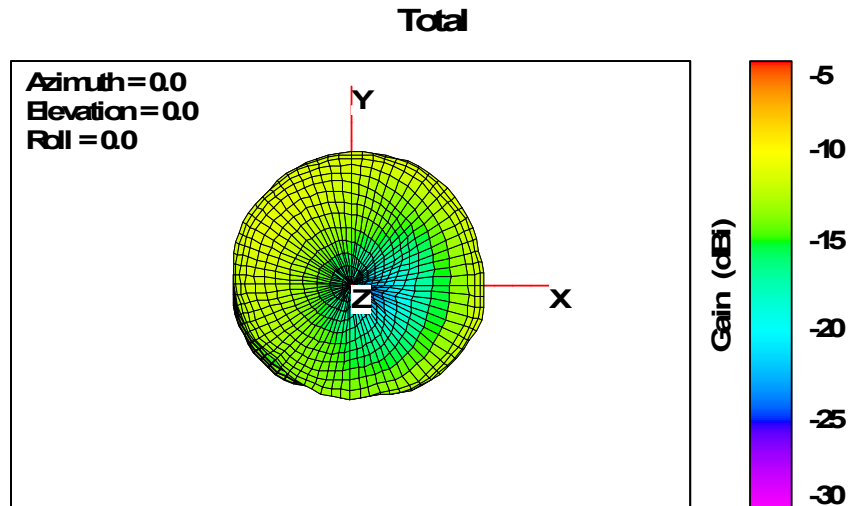
Placed and fixed with tape shown as below.



Free Space

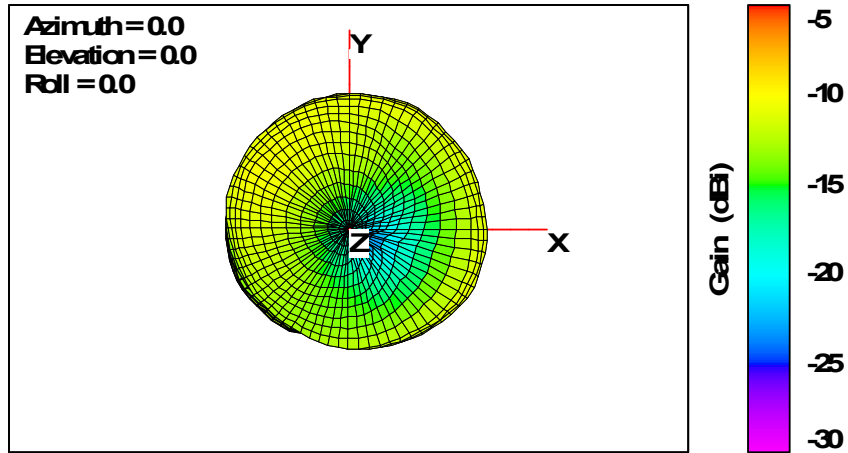
5. Free Space Position Antenna Gain Patterns

Please refer to as below.

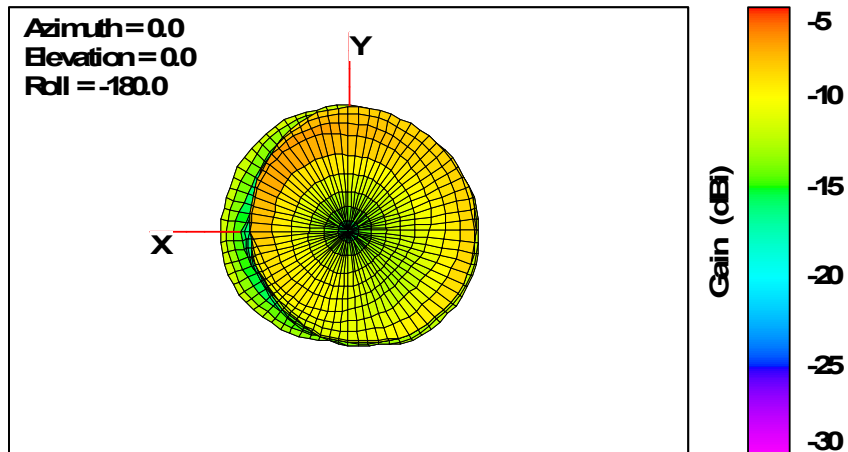


Free Space for 2400MHz

Total

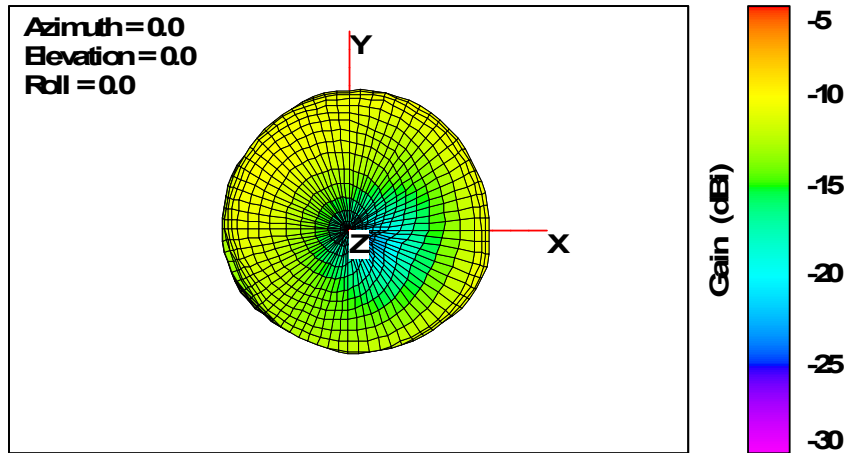


Theta

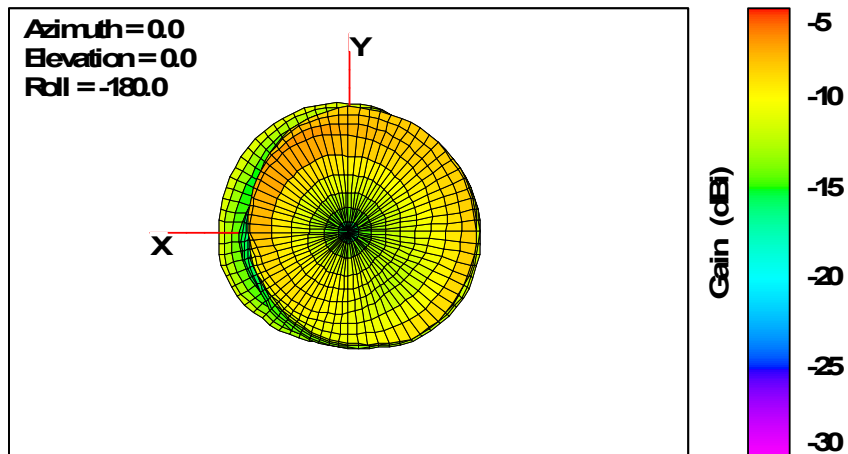


Free Space for 2410MHz

Total

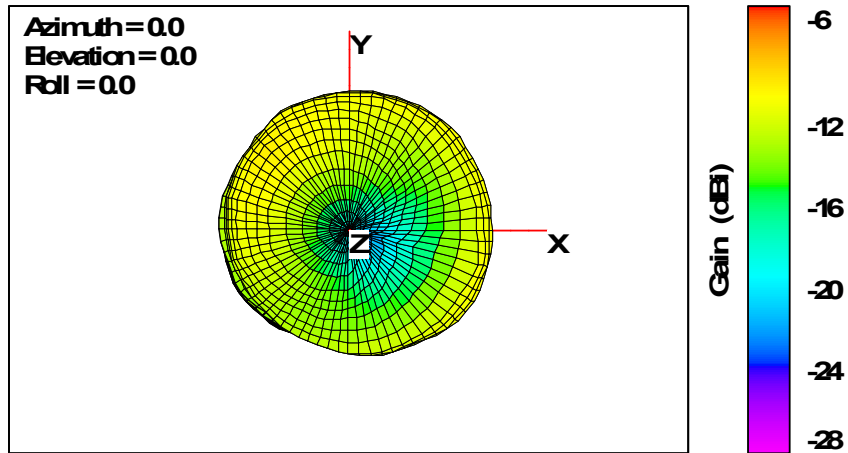


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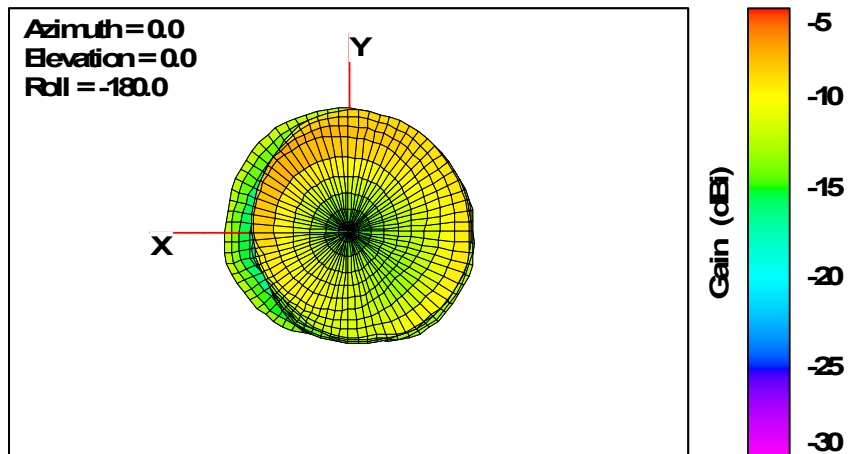


Free Space for 2420MHz

Total

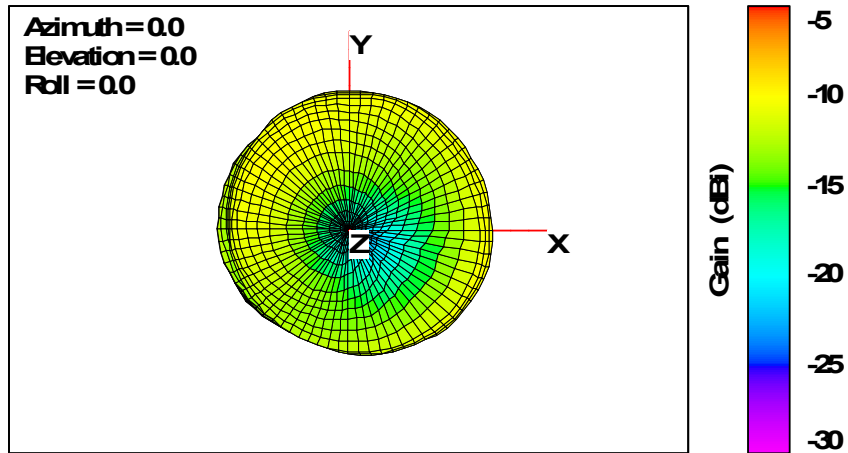


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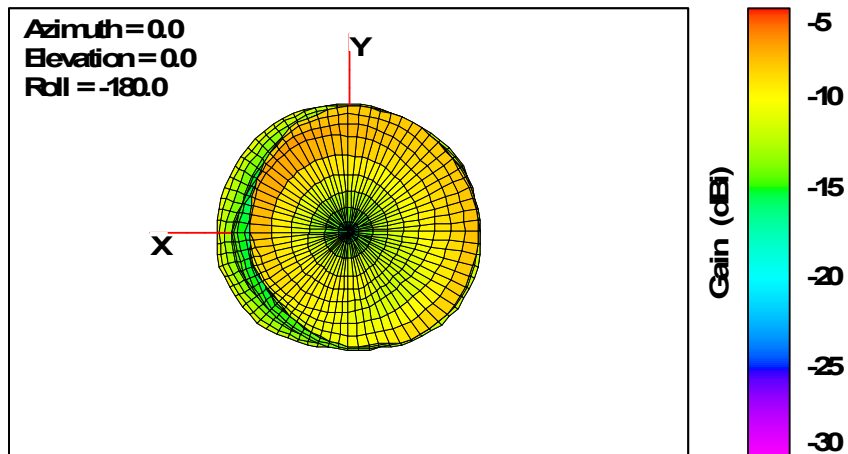


Free Space for 2430MHz

Total

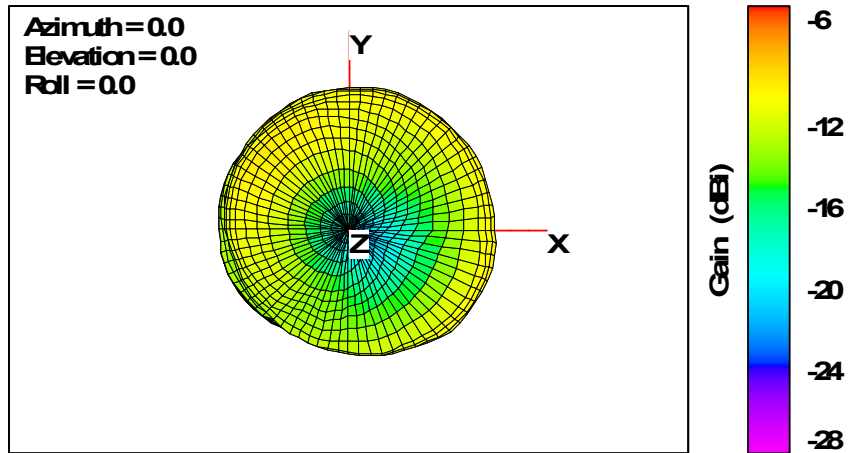


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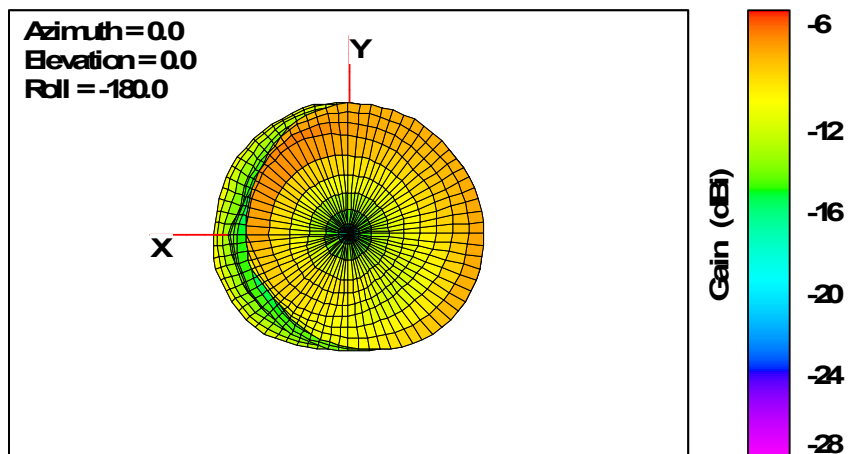


Free Space for 2440MHz

Total

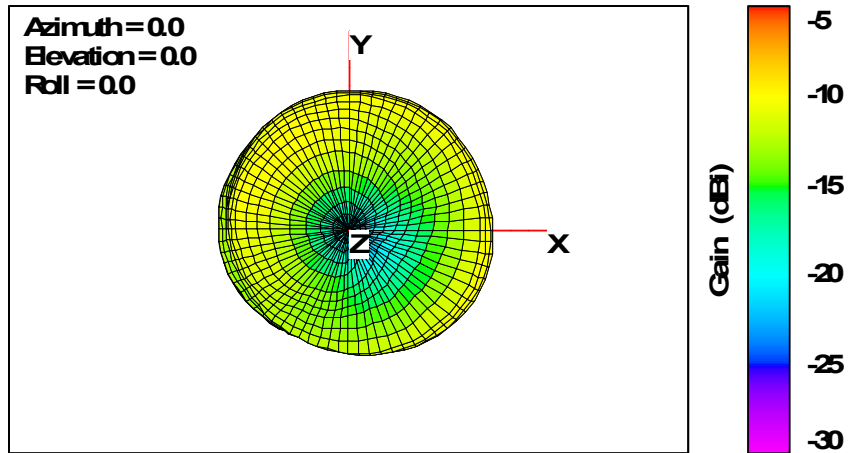


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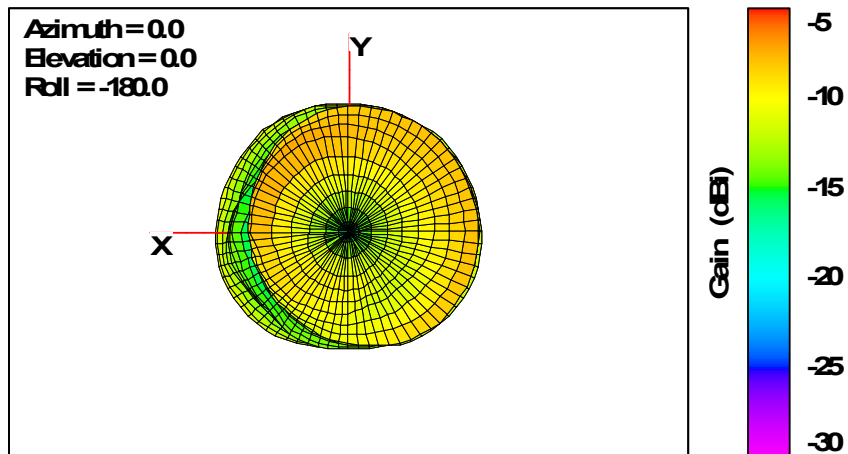


Free Space for 2450MHz

Total

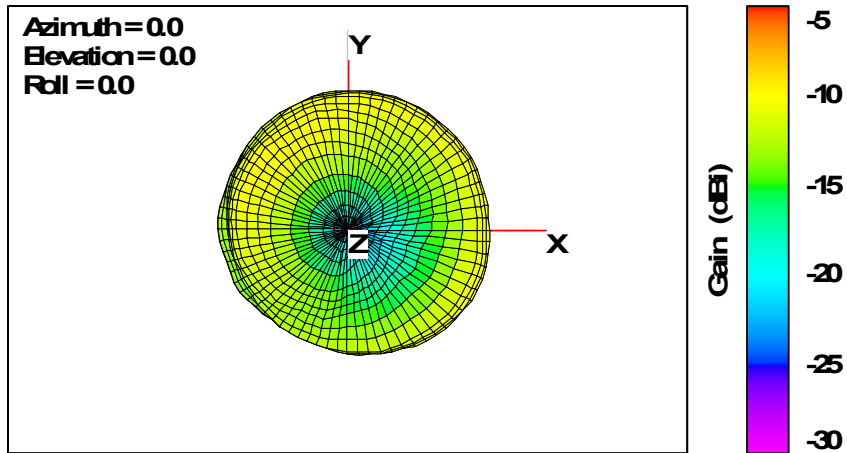


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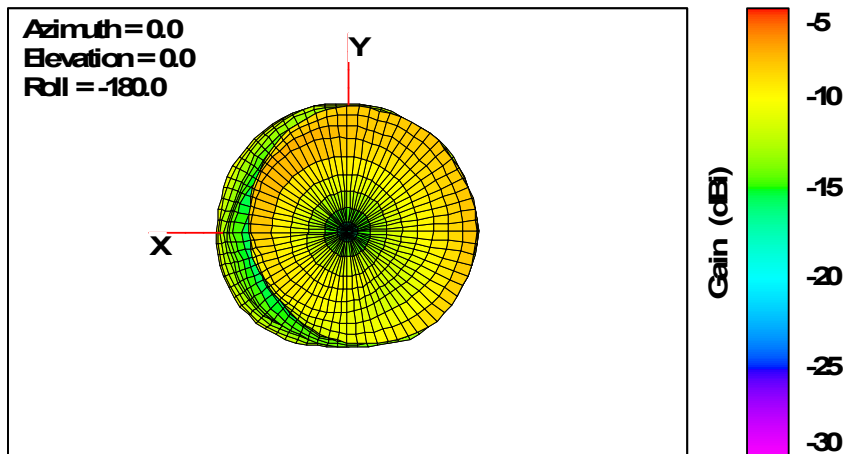


Free Space for 2460MHz

Total

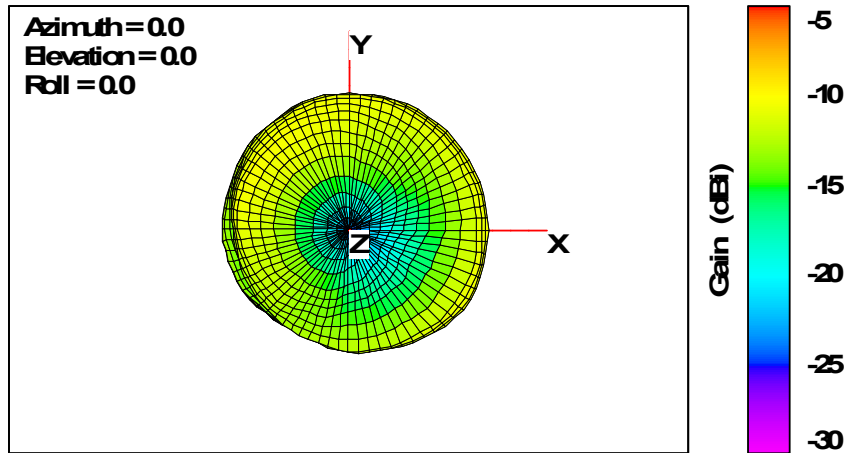


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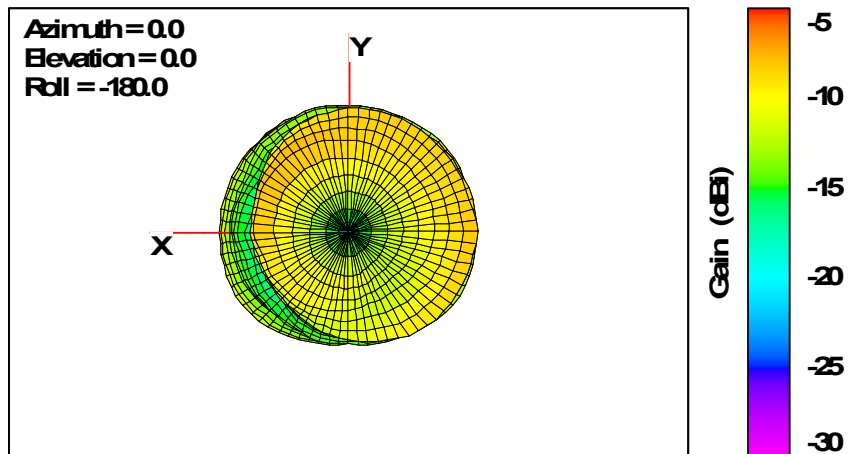


Free Space for 2470MHz

Total

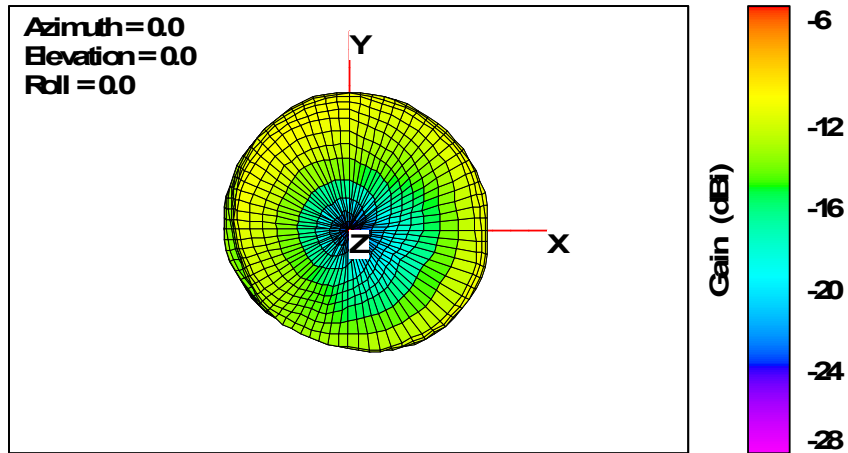


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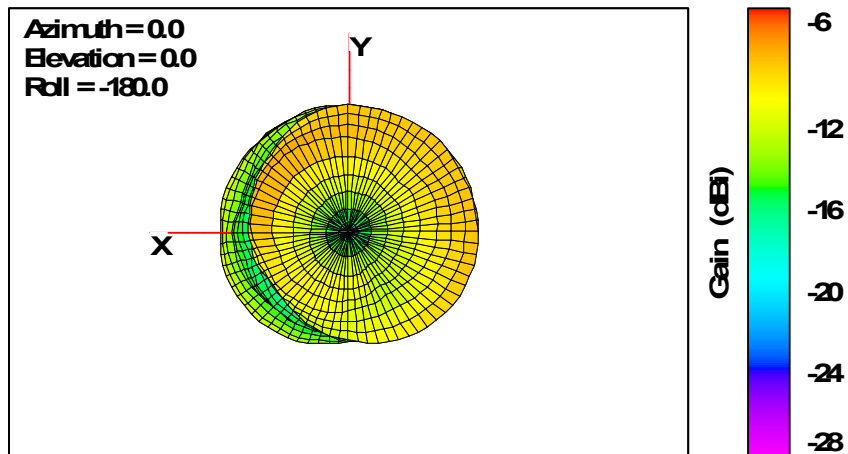


Free Space for 2480MHz

Total

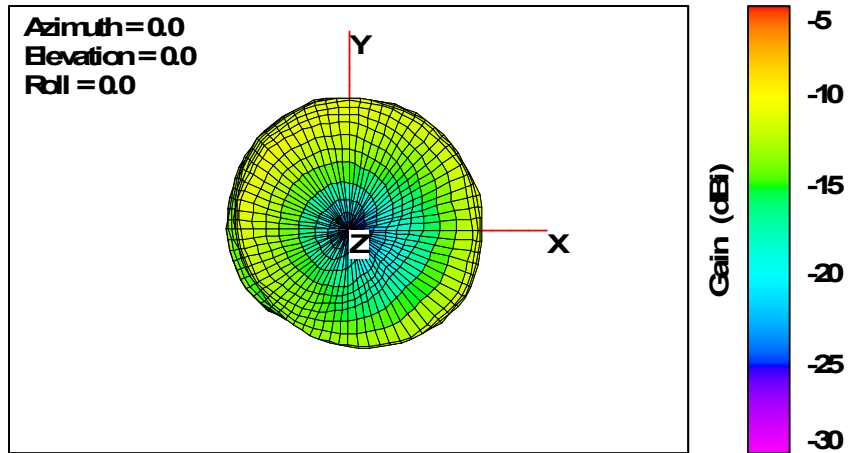


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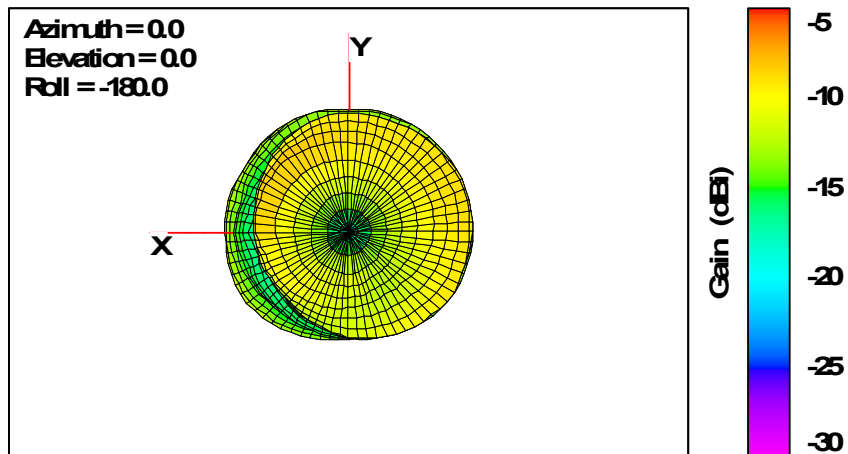


Free Space for 2490MHz

Total



Total



Free Space for 2500MHz

--THE END--