

1. Overview

1.1 Scope of application

This requirement specifies the antenna technical requirements and material requirements specifications for THOT-OW265-V0.1 products.

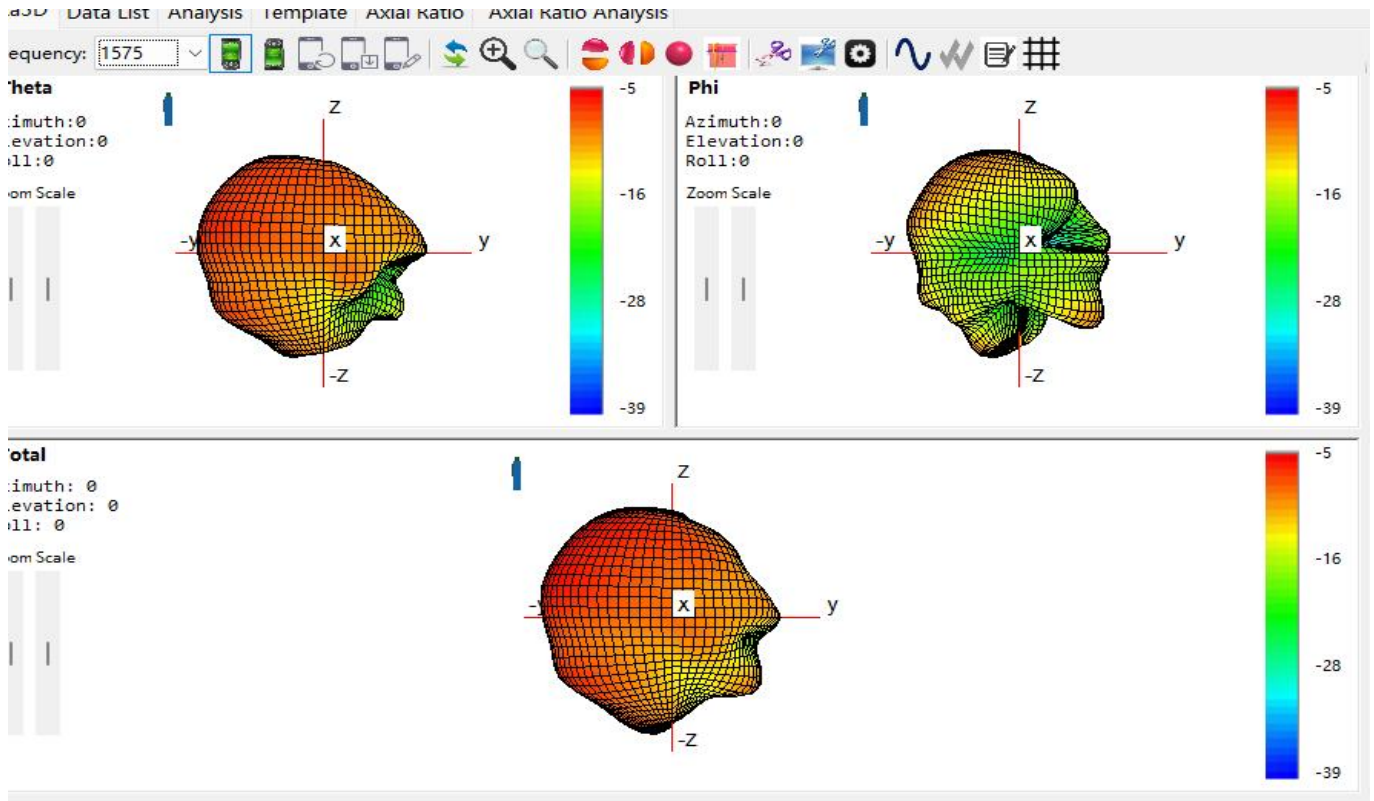
This requirement applies to the selection, testing and acceptance of THOT-OW265-V0.1 antennas.

1.2 Project basic information

Antenna name: :	<u>THOT-OW265-V0.1</u>		
Antenna frequency :	WIFI:2400MHz-2500MHz	5.1G-5.8G	
	GPS L1:1575.42MHz	L5:1176.45MHz	
Antenna material: :	metal		
Antenna manufacturer :	SHENZHEN YUSHENG COMMUNICATION EQUIPMENT CO., LTD		
Antenna type :	Metal Frame Antenna		
Antenna size :	View drawings		
Manufacturer address :	4A,4th Floor, Building 2, Nantai Cloud Innovation Valley, Guangming District, Shenzhen		

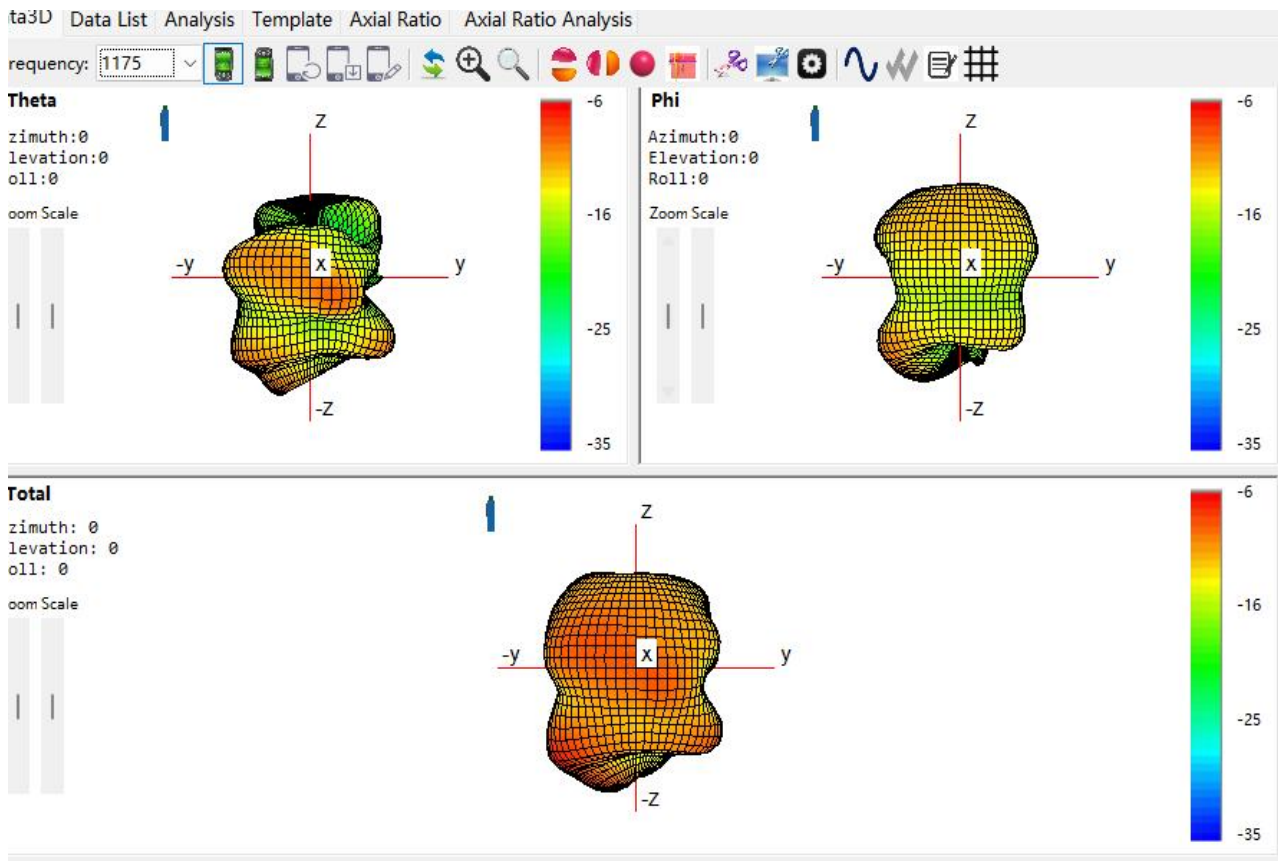
2.2.7 GPS Antenna Efficiency and Gain

GPS-L1



Frequency(MHz)	Efficiency(dB)	Gain(dBi)	Efficiency(%)
1550	-9.56	-6.54	11.06
1555	-9.48	-6.54	11.27
1560	-9.41	-6.44	11.46
1565	-9.31	-6.32	11.71
1570	-9.2	-6.22	12.03
1575	-9.11	-6.13	12.28
1580	-9.09	-6.11	12.34
1585	-9.09	-6.19	12.34
1590	-9.09	-6.22	12.34
1595	-9.12	-6.19	12.24
1600	-9.16	-6.23	12.13

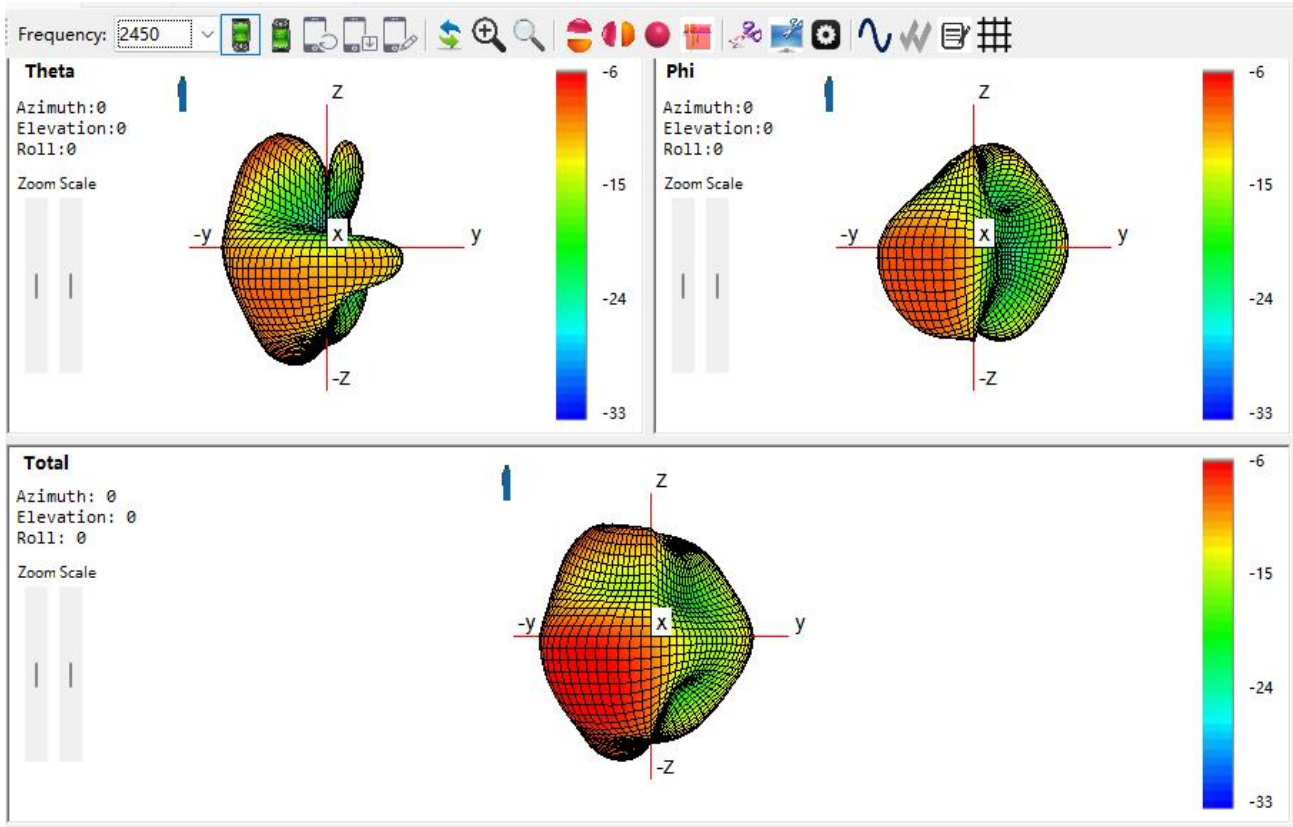
GPS-L5



Frequency(MHz)	Efficiency(dB)	Gain(dBi)	Efficiency(%)
1150	-12.27	-8.33	5.93
1155	-12.16	-8.15	6.07
1160	-12.06	-7.99	6.23
1165	-11.96	-7.92	6.36
1170	-11.89	-7.95	6.47
1175	-11.77	-7.87	6.65
1180	-11.66	-7.69	6.82
1185	-11.57	-7.59	6.96
1190	-11.53	-7.63	7.03
1195	-11.51	-7.69	7.07
1200	-11.51	-7.73	7.07

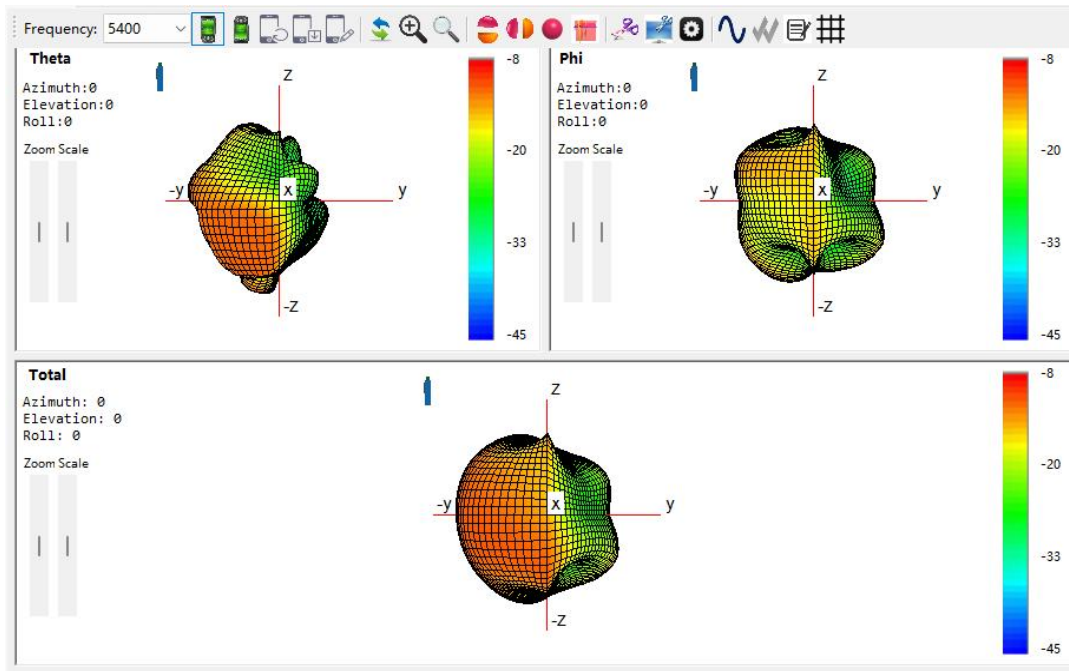
2.2.8 WIFI Antenna Efficiency and Gain

2.4G-WIFI



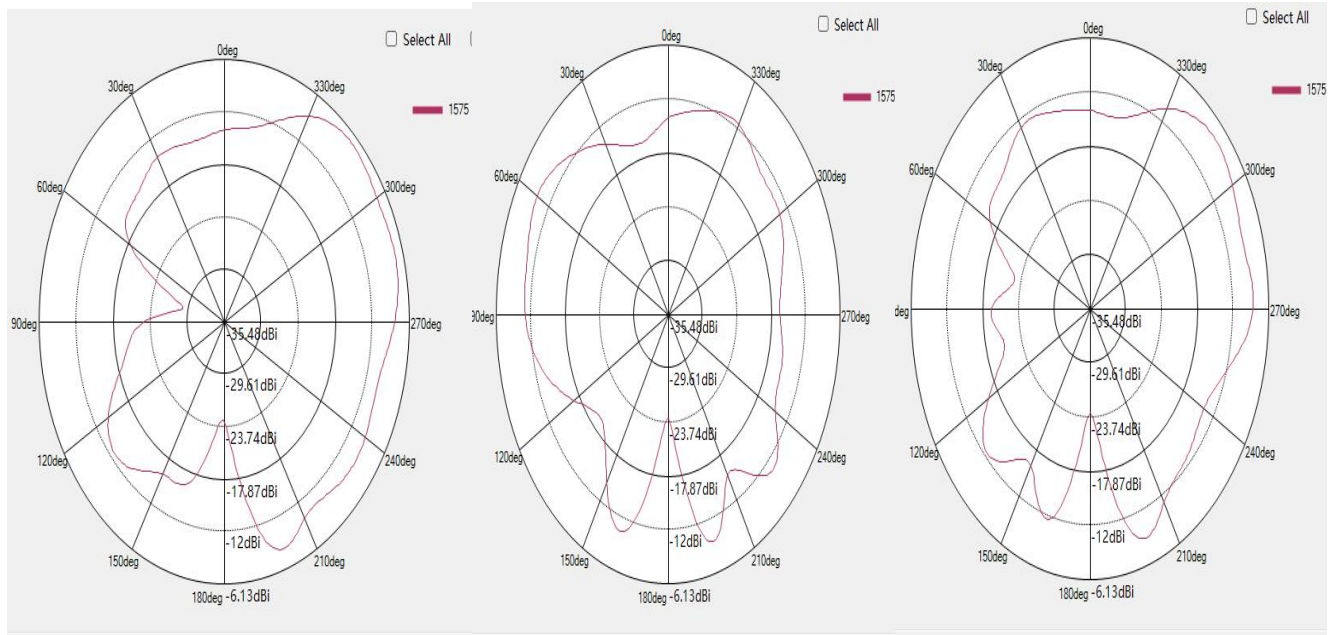
Frequency(MHz)	Efficiency(dB)	Gain(dBi)	Efficiency(%)
2400	-10.36	-7.08	9.2
2410	-10.33	-6.89	9.26
2420	-10.31	-6.68	9.3
2430	-10.26	-6.49	9.43
2440	-10.24	-6.41	9.45
2450	-10.35	-6.47	9.22
2460	-10.55	-6.7	8.82
2470	-10.51	-6.68	8.89
2480	-10.5	-6.66	8.92
2490	-10.57	-6.79	8.77
2500	-10.62	-6.76	8.67

5G-WIFI



Frequency(MHz)	Efficiency(dB)	Gain(dBi)	Efficiency(%)
5100	-10.6	-4.6	8.72
5150	-10.91	-4.97	8.11
5200	-11.29	-5.38	7.43
5250	-12.03	-6.01	6.27
5300	-12.91	-7.05	5.11
5350	-13.51	-7.99	4.46
5400	-13.75	-8.51	4.22
5450	-14.31	-9.6	3.7
5500	-15.01	-10.98	3.15
5550	-14.96	-11.48	3.19
5600	-14.97	-11.77	3.19
5650	-14.93	-11.71	3.21
5700	-14.96	-11.19	3.19
5750	-14.73	-10.6	3.37
5825	-14.57	-9.92	3.49

2.2.9 2D-radiation pattern-GPS-L1

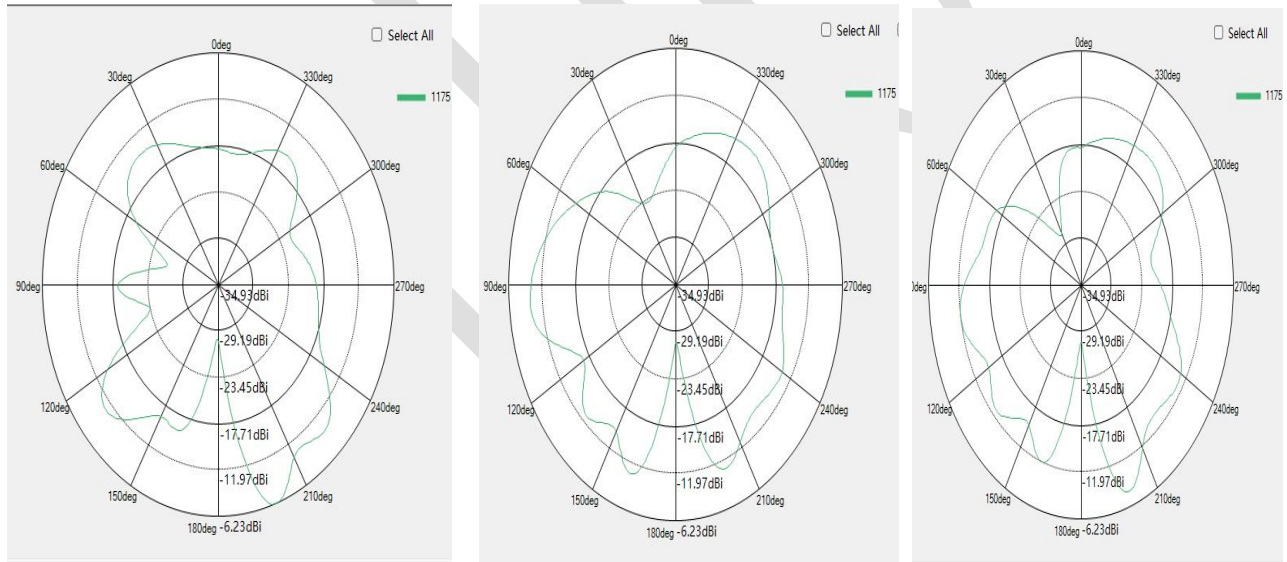


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2.2.10 2D-radiation pattern-L5

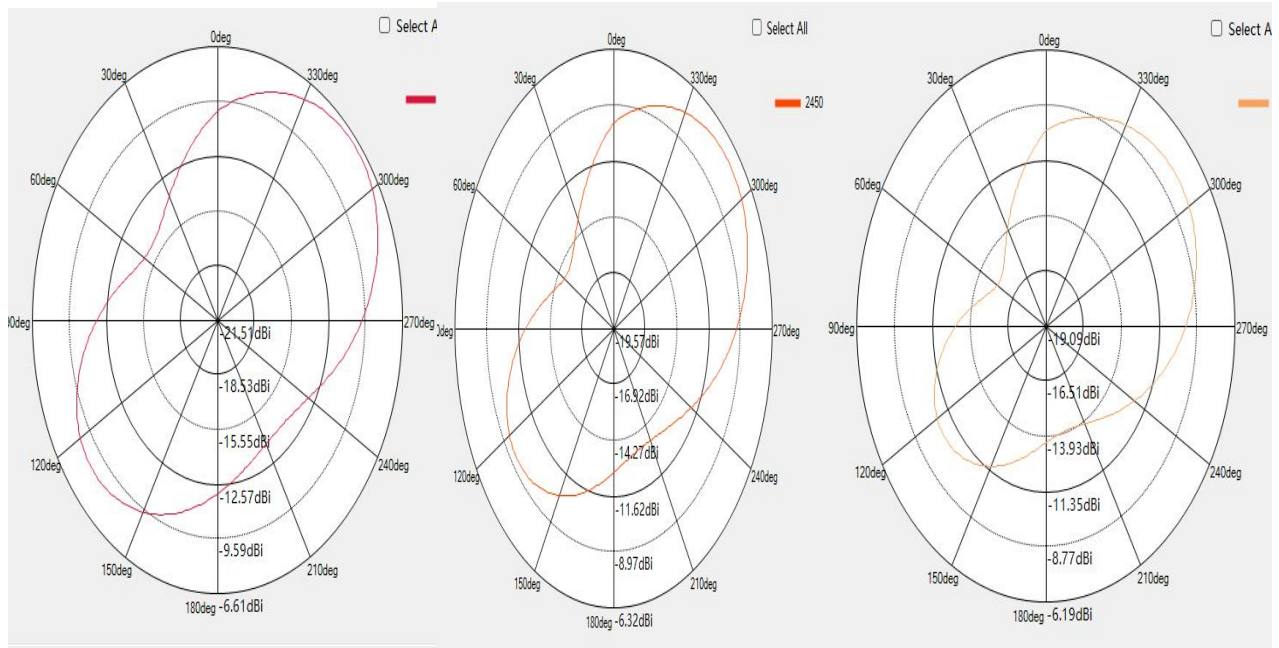


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2.2.11 2D-radiation pattern-WIFI 2.4G

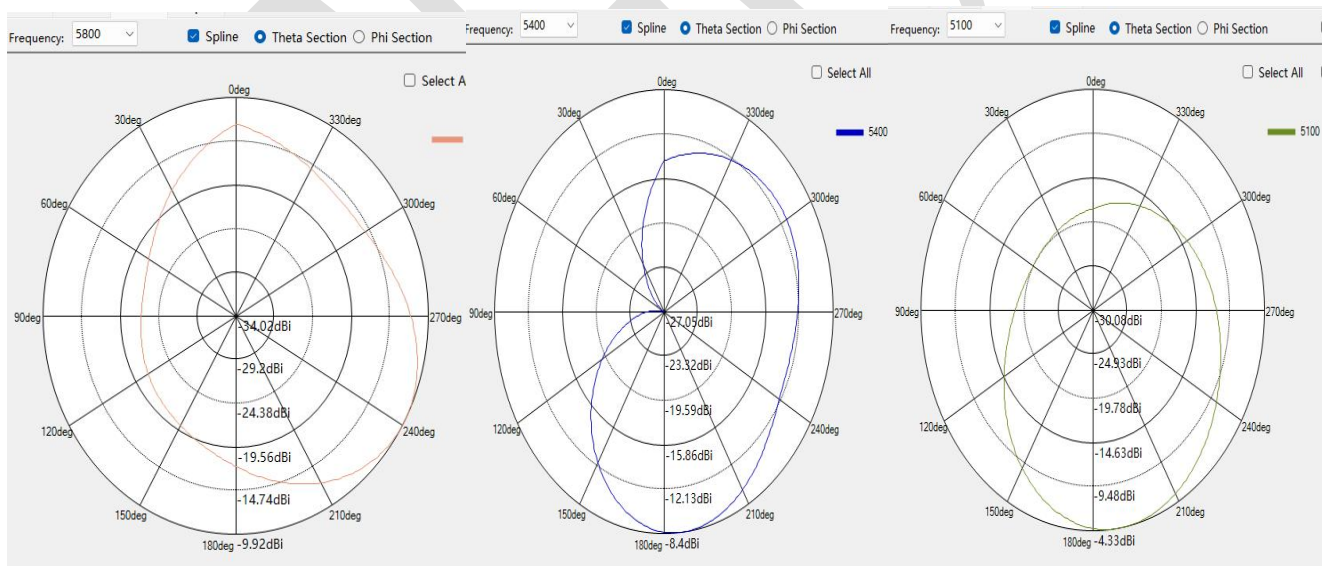


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2.2.12 2D-radiation pattern-WIFI 5.8G



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