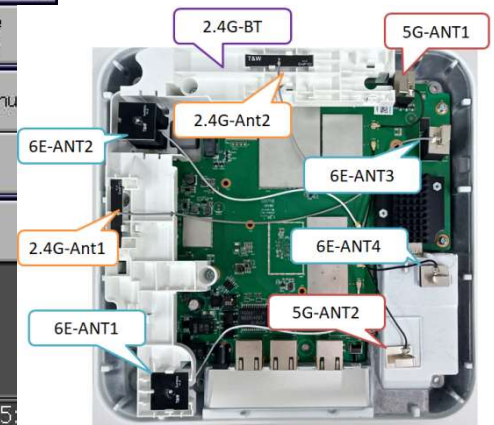


Isolation



6E-ANT3&6E-ANT4



Return Loss and Isolation



Test results

	Return loss			Isolation		
Frequency (GHz)	2.4-2.5GHz	5.15-5.85GHz	5.91-7.125GHz	2.4-2.5GHz	5.15-5.85GHz	5.91-7.125GHz
2.4G-BT	<-17dB	NA	NA	NA	NA	NA
2.4G-ANT1	<-12dB	NA	NA	<-25dB		
2.4G-ANT2	<-11dB	NA	NA			
5G-ANT1	NA	<-14dB	NA			
5G-ANT2	NA	<-14dB	NA			
6E-ANT1	NA	NA	<-13dB			
6E-ANT2	NA	NA	<-13dB			
6E-ANT3	NA	NA	<-13dB			
6E-ANT4	NA	NA	<-12dB			

2D/3D Radiation pattern

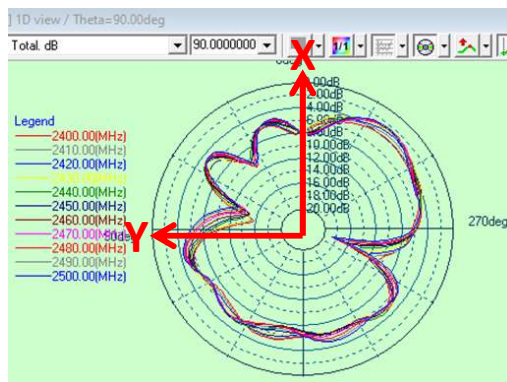
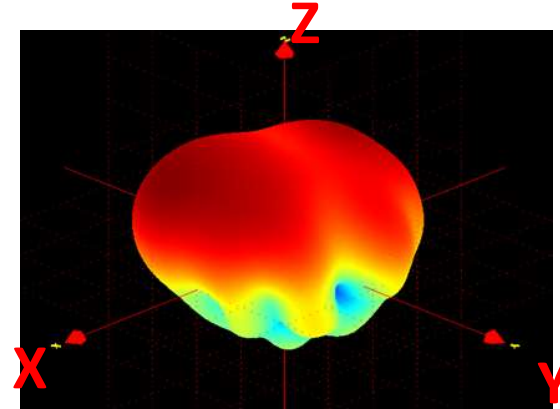
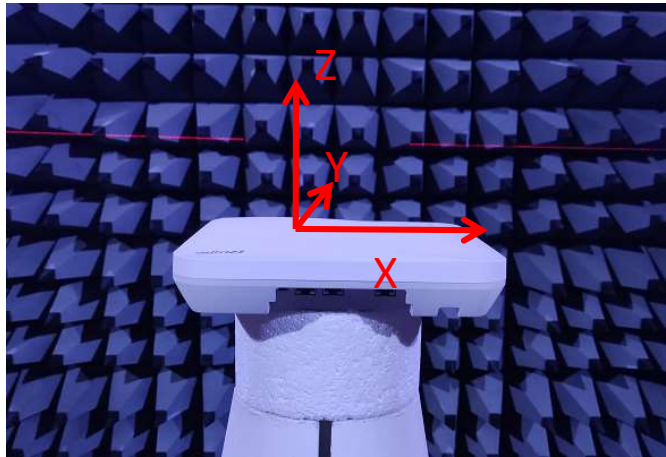
T&W

Test condition

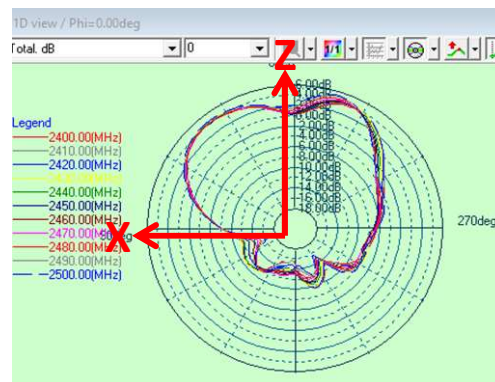


2D/3D Radiation pattern 2.4G-ANT1

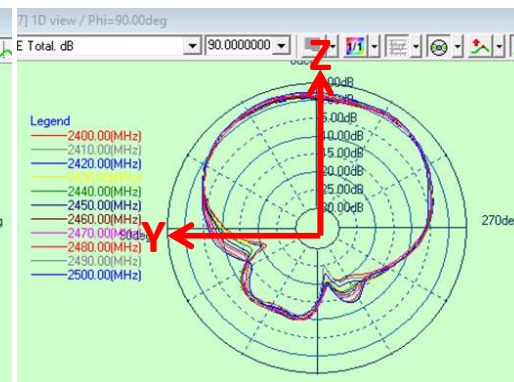
T&W



H (Theta=90)



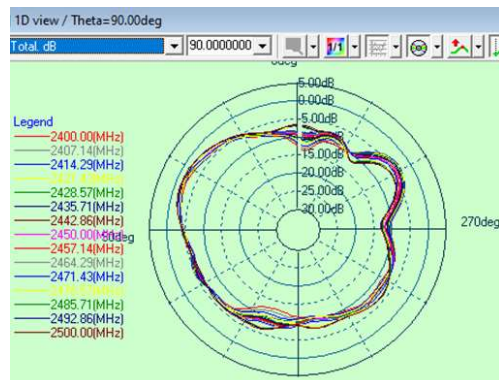
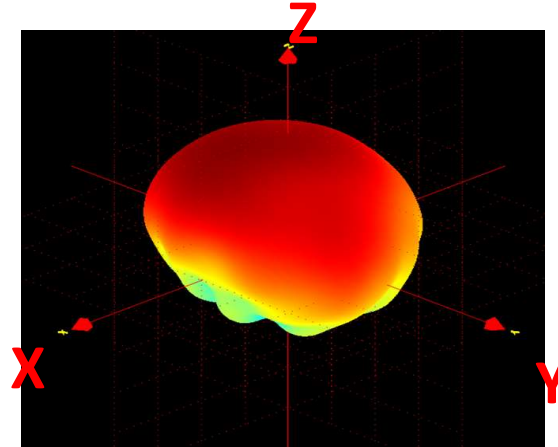
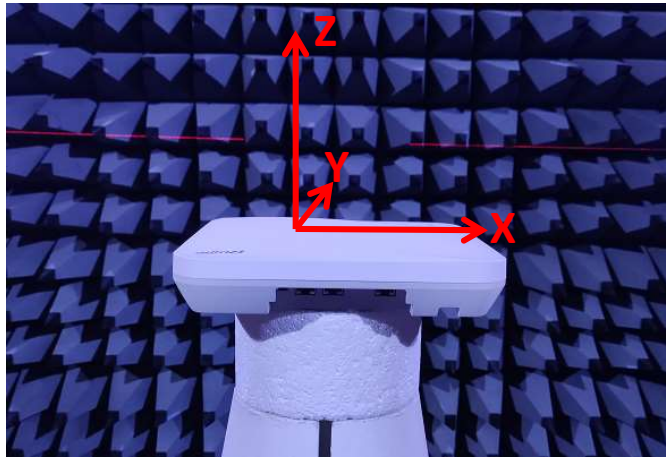
E1 (Phi=0)



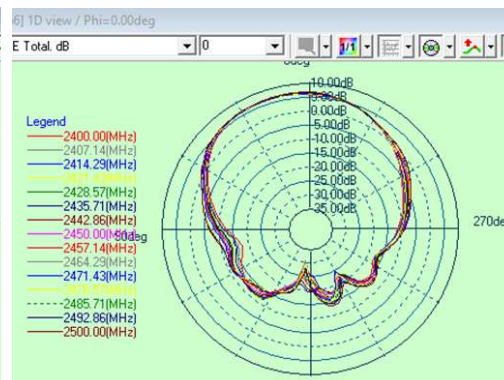
E2 (Phi=90)

2D/3D Radiation pattern 2.4G-ANT2

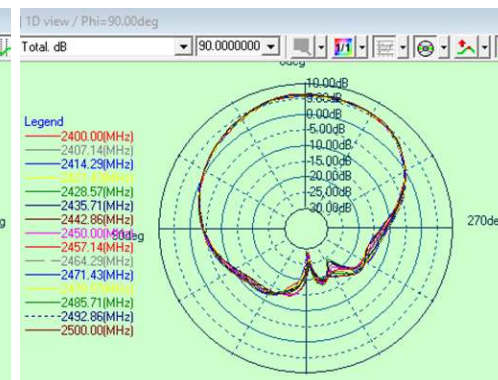
T&W



H (Theta=90)



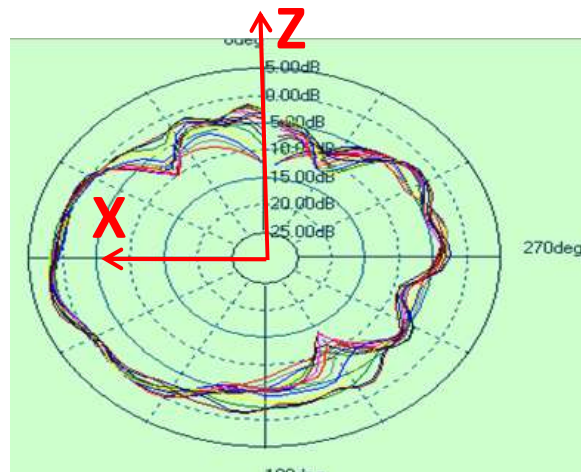
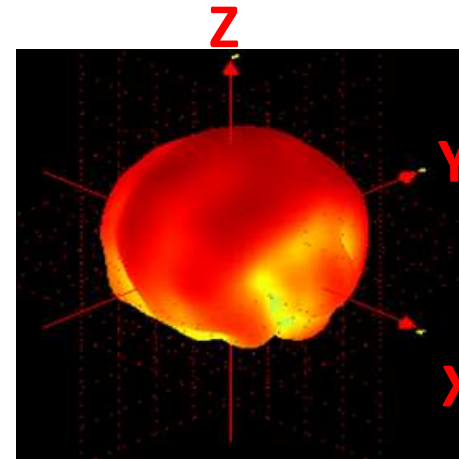
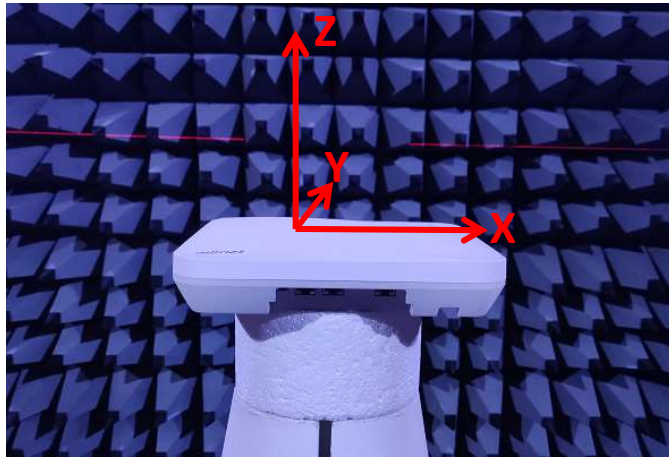
E1 (Phi=0)



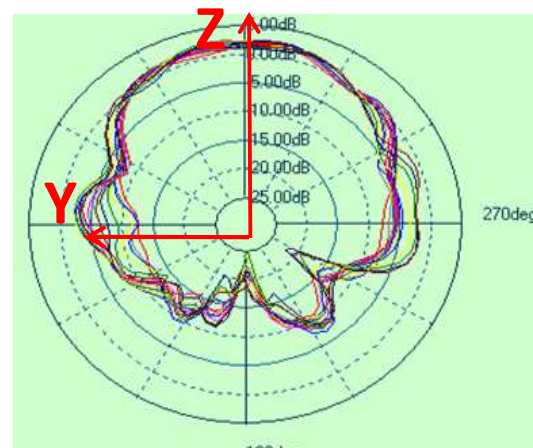
E2 (Phi=90)

2D/3D Radiation pattern 2.4G-BT

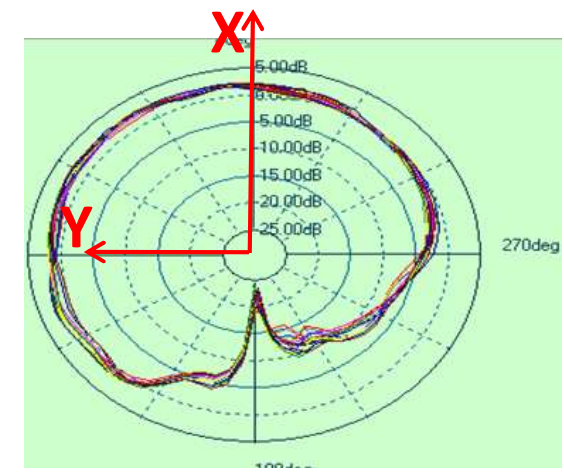
T&W



E1 ($\Phi=0$)



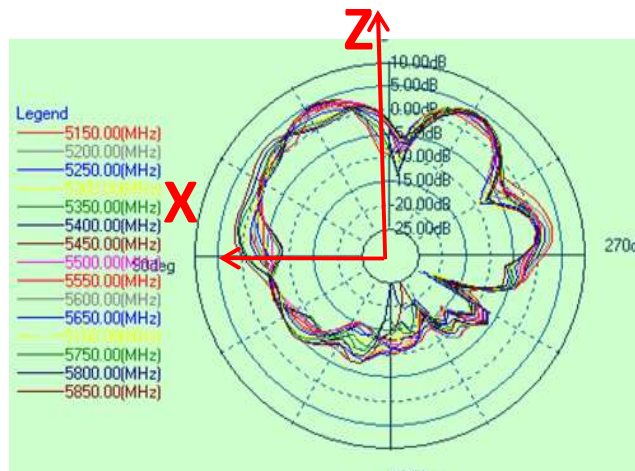
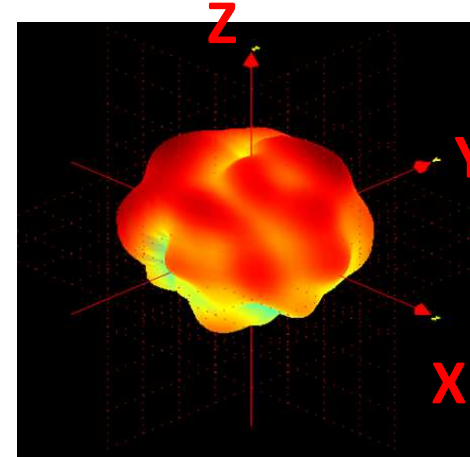
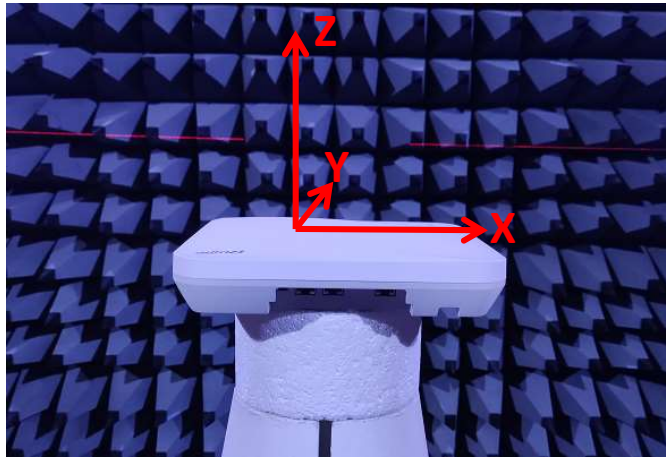
E1 ($\Phi=90$)



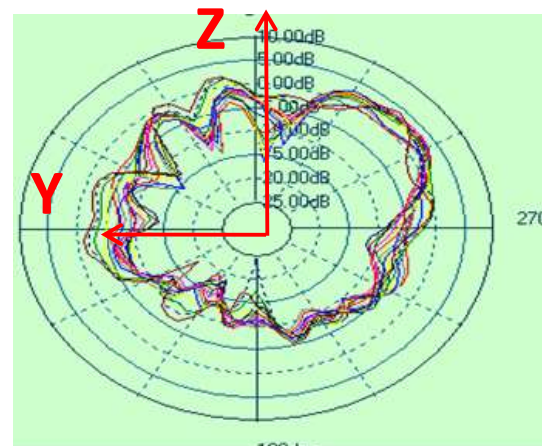
H ($\Theta=90$)

2D/3D Radiation pattern 5G-ANT1

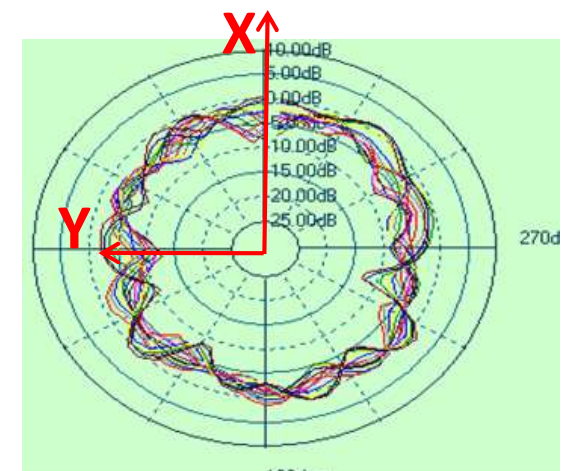
T&W



E1 ($\Phi=0$)



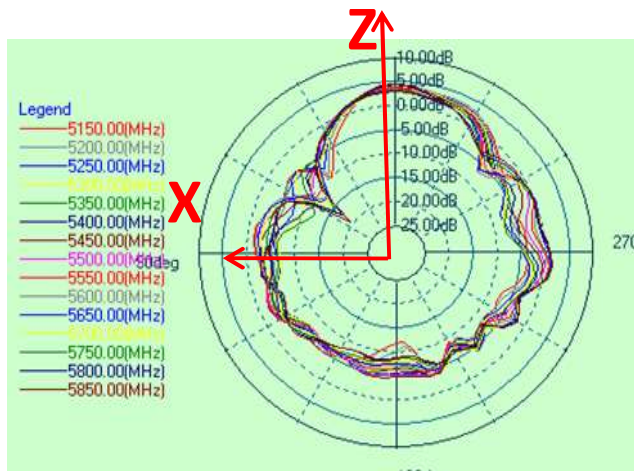
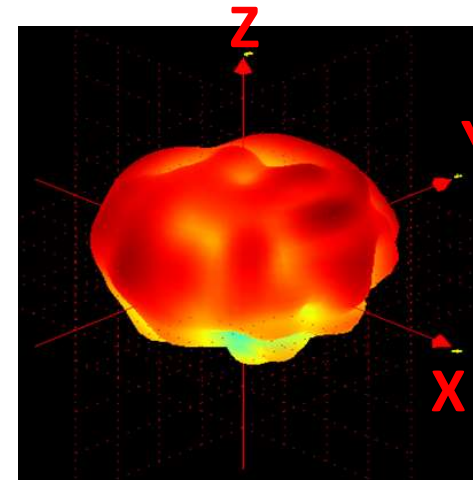
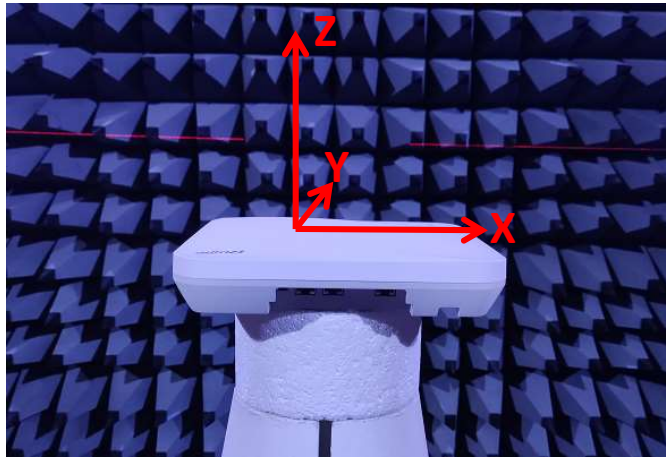
E1 ($\Phi=90$)



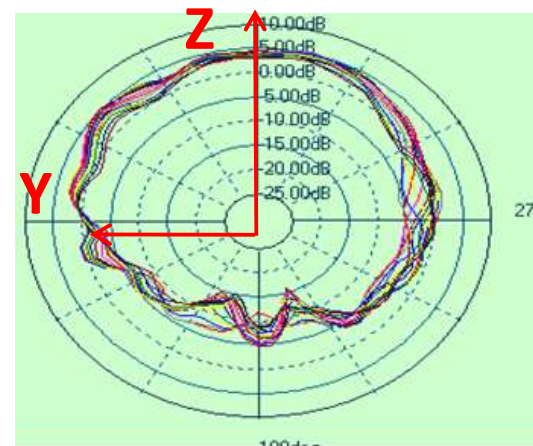
H ($\Theta=90$)

2D/3D Radiation pattern 5G-ANT2

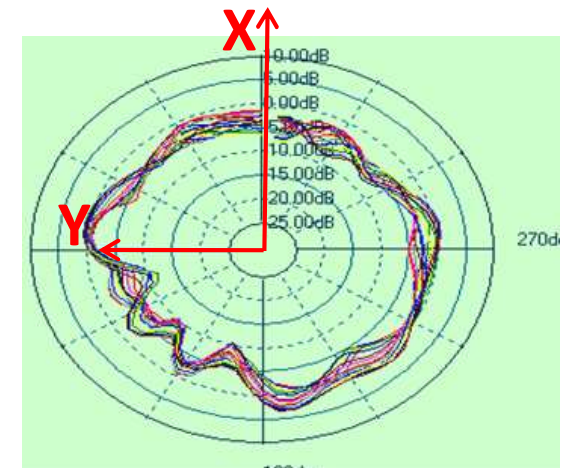
T&W



E1 (Phi=0)



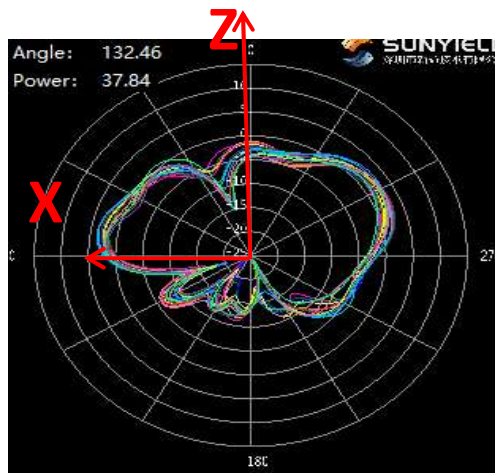
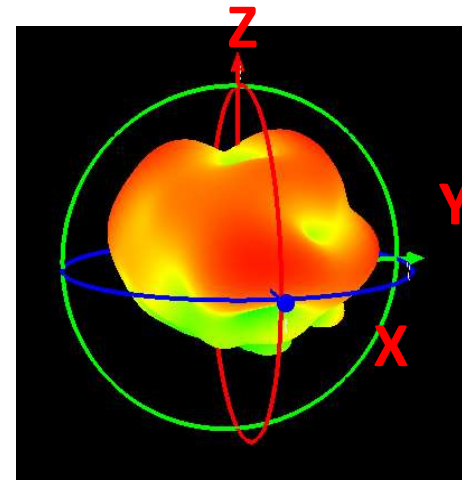
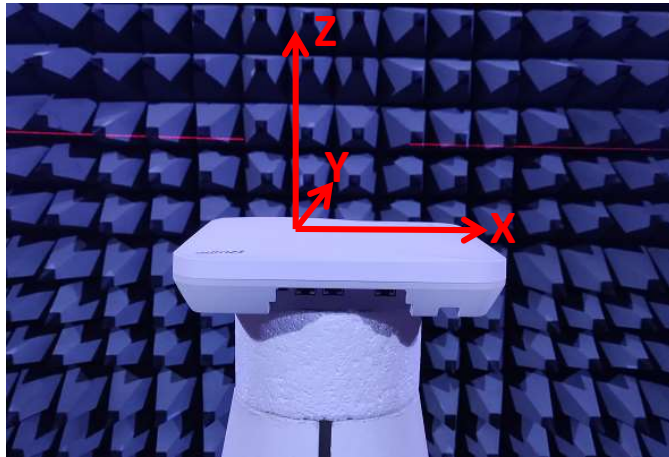
E1 (Phi=90)



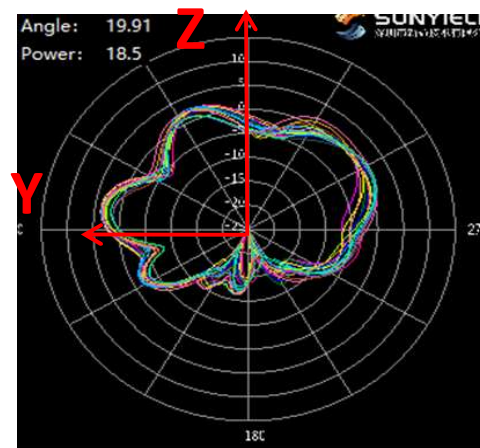
H (Theta=90)

2D/3D Radiation pattern 6E-ANT1

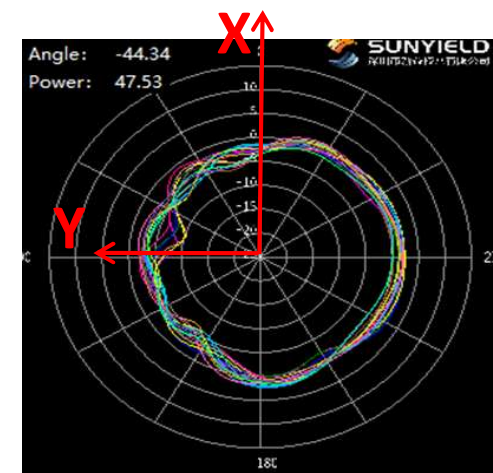
T&W



E1 (Phi=0)



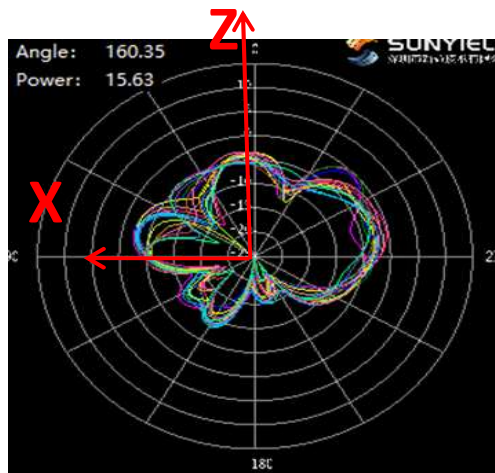
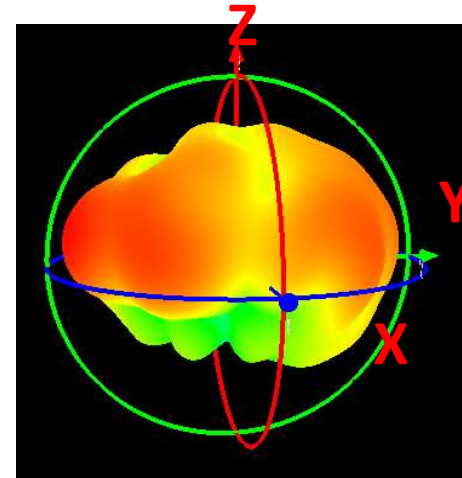
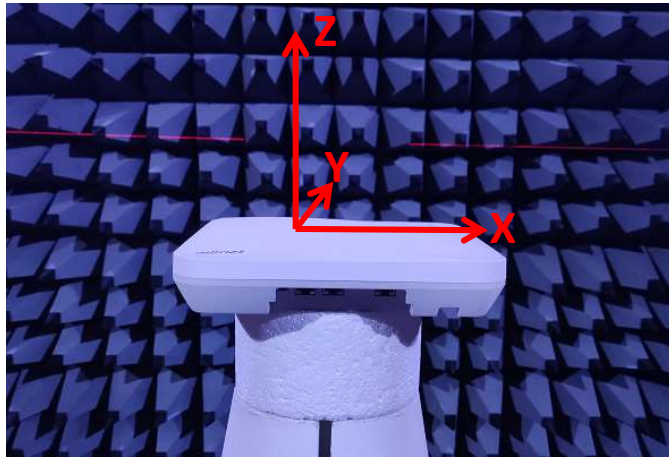
E1 (Phi=90)



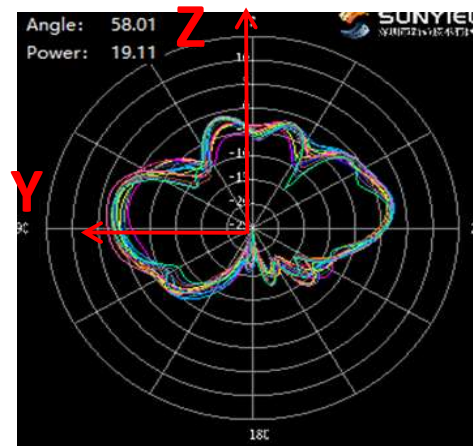
H (Theta=90)

2D/3D Radiation pattern 6E-ANT2

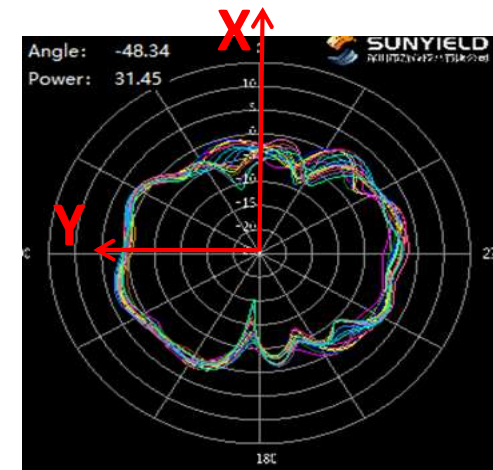
T&W



E1 ($\Phi=0$)



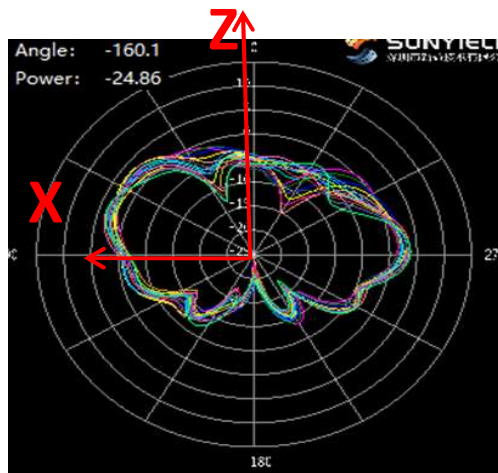
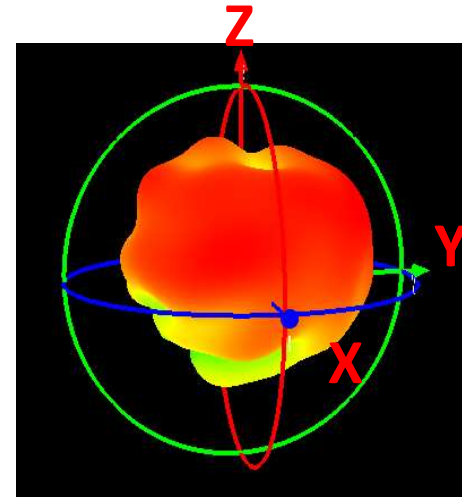
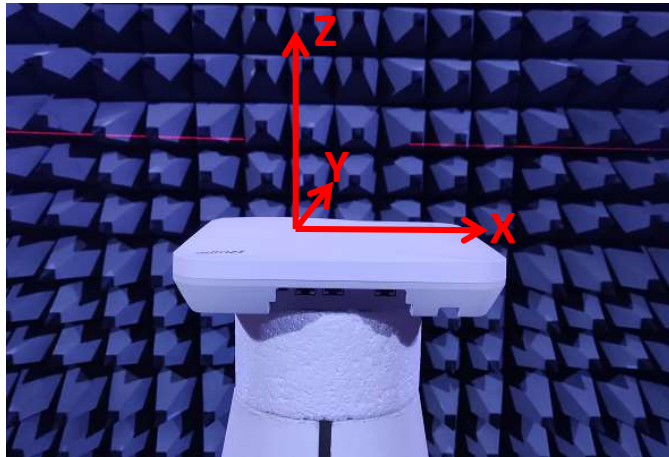
E1 ($\Phi=90$)



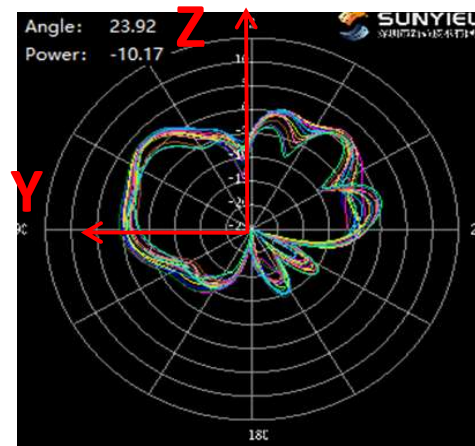
H ($\Theta=90$)

2D/3D Radiation pattern 6E-ANT3

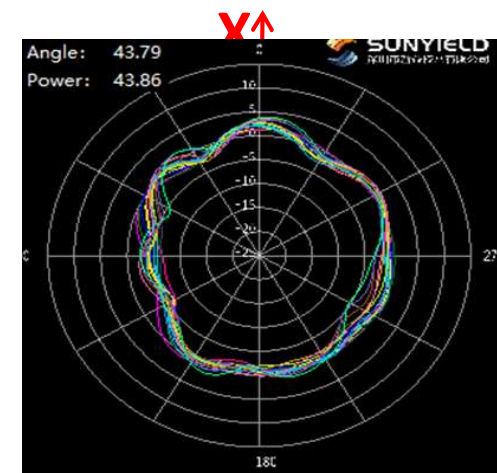
T&W



E1 (Phi=0)



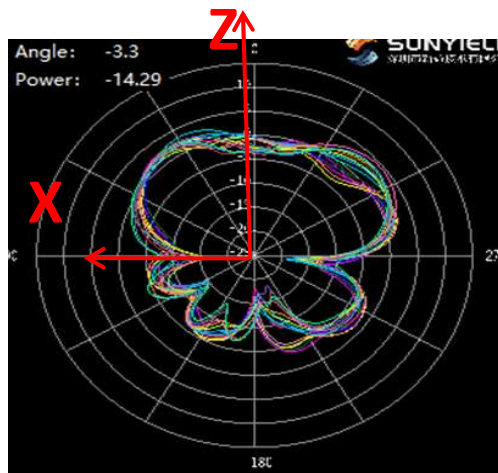
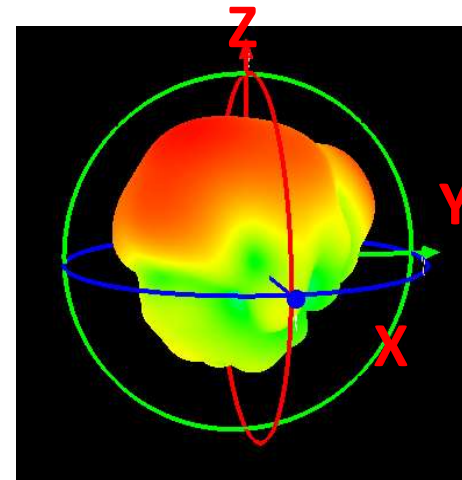
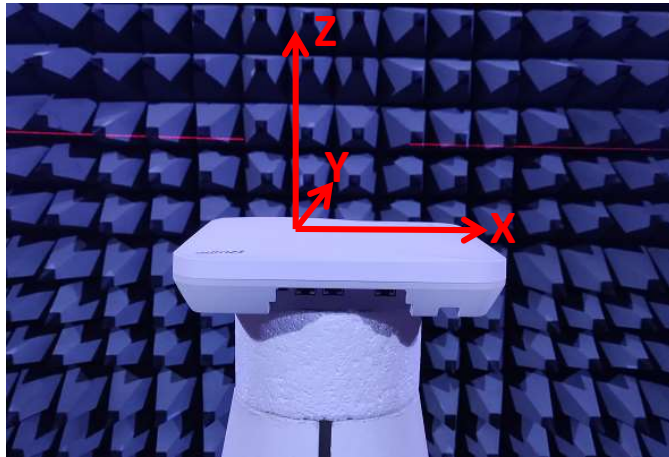
E1 (Phi=90)



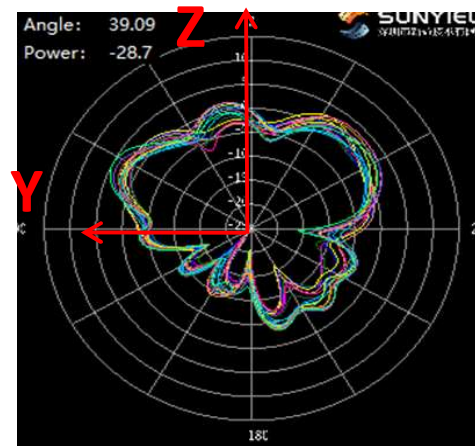
H (Theta=90)

2D/3D Radiation pattern 6E-ANT4

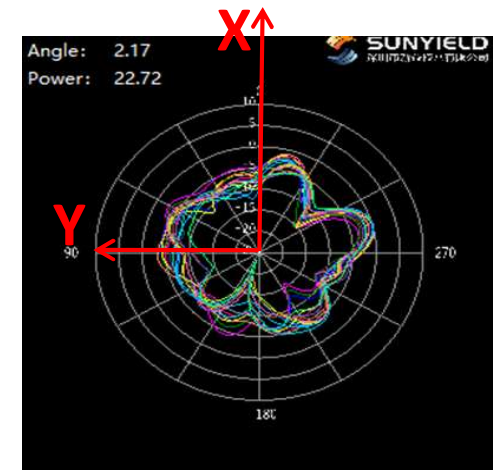
T&W



E1 ($\Phi=0$)



E1 ($\Phi=90$)



H ($\Theta=90$)

2D/3D Radiation pattern(Combination)

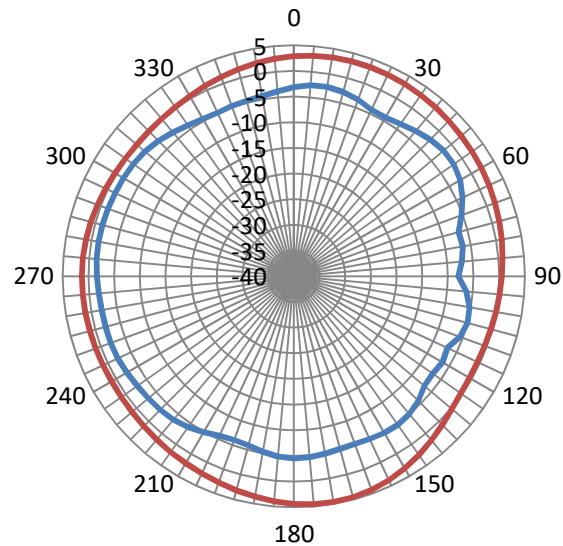
Horizontal planes (Top view)

Showing azimuth (0 degrees) and 30 degrees downtilt patterns (averaged patterns for all applicable antennas)

— Average Azimuth

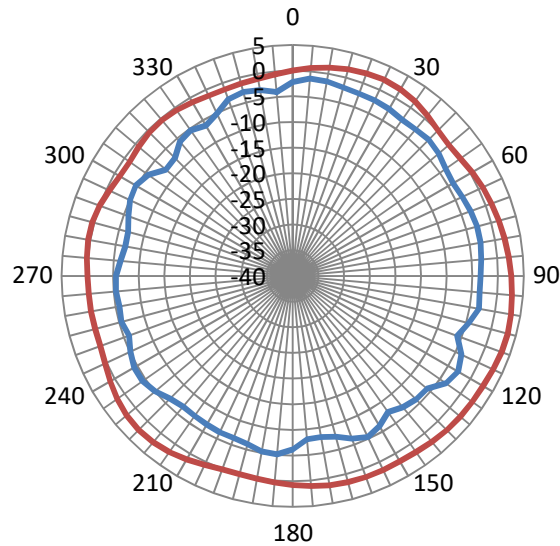
— Average Downtilt

2.45GHz



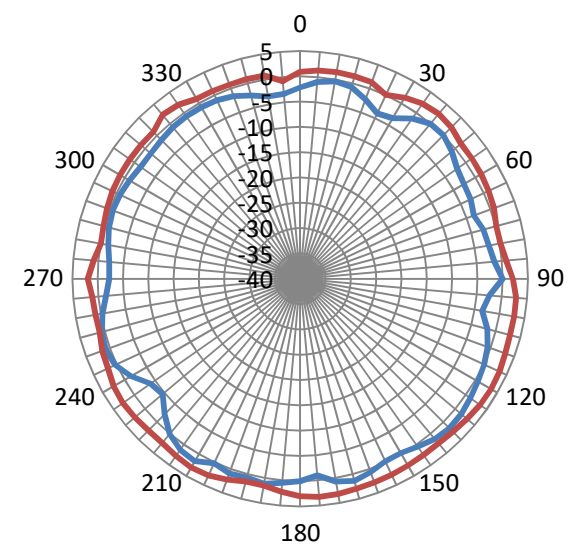
2.45GHz(2.4G-ANT1,2)

5.5GHz



5.5GHz(5G-ANT1,2)

6.5GHz



6.5GHz(6G-ANT1,2,3,4)

2D/3D Radiation pattern(Combination)

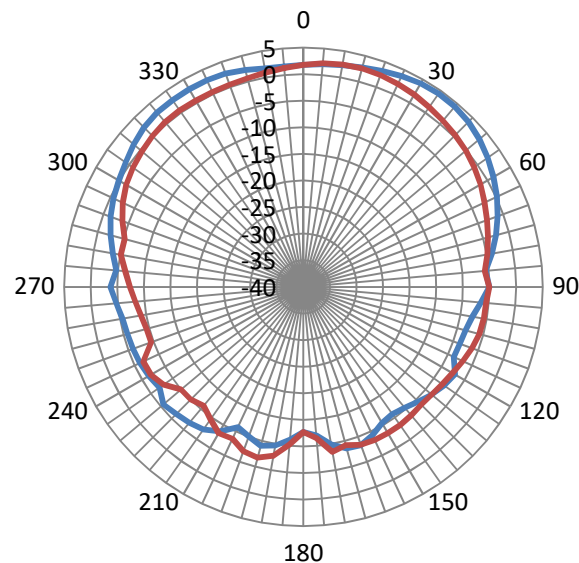
Vertical (elevation) planes (side view. AP facing up)

Showing side view with AP rotated 0 and 90 degrees (averaged patterns for all applicable antennas)

— Average Elevation 0°

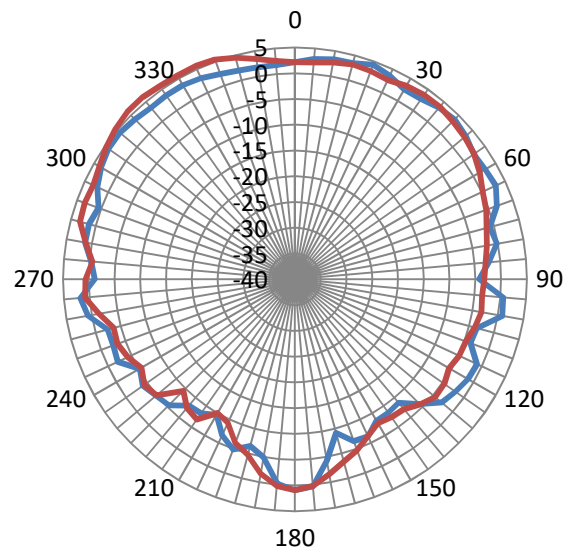
— Average Elevation 90°

2.45GHz



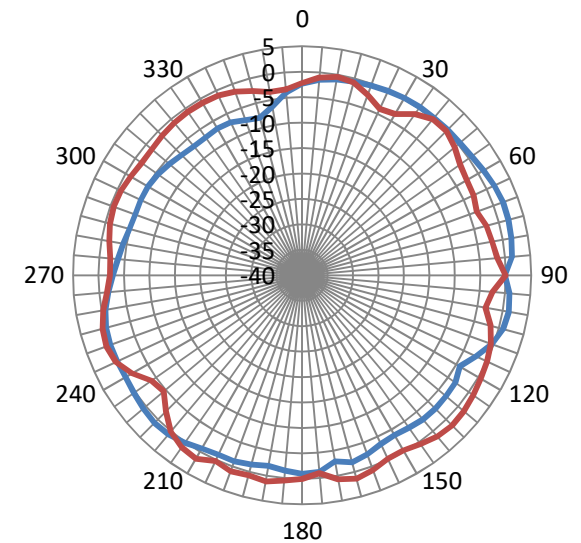
2.45GHz(2.4G-ANT1,2)

5.5GHz



5.5GHz(5G-ANT1,2)

6.5GHz



6.5GHz(6G-ANT1,2,3,4)

Peak Gain and Efficiency

ANT	Frequency (GHz)	Peak Gain (dBi)	Efficiency (%)
2.4G-ANT1	2.4	2.96	62.3
	2.5	3.00	63.9
2.4G-ANT2	2.4	2.98	62.5
	2.5	2.83	65.2
2.4G-BT	2.4	3.52	62.5
	2.5	3.27	65.2
5G-ANT1	5.15	4.08	65.8
	5.85	4.01	70.1
5G-Ant2	5.15	3.98	64.9
	5.85	4.10	65.9

Peak Gain and Efficiency

ANT	Frequency (GHz)	Peak Gain (dBi)	Efficiency (%)
6E-Ant1	5.91	3.46	60.2
	6.5	3.50	65.3
	7.125	3.33	65.5
6E-Ant2	5.91	3.42	60.1
	6.5	3.48	63.2
	7.125	3.50	67.7
6E-Ant3	5.91	3.32	64.8
	6.5	3.46	65.9
	7.125	3.47	66.8
6E-Ant4	5.91	3.48	60.0
	6.5	3.37	64.9
	7.125	3.50	67.9

1. 天线Return loss $< -10\text{dB}$; Isolation $< -25\text{dB}$;
2. 由于底壳是金属材质，信号反射比较强，天线增益都比较高，符合吸顶产品使用；
3. 天线辐射场型正面最强，侧边也有一定的信号覆盖，底部最弱，满足性能使用；

Thanks!

