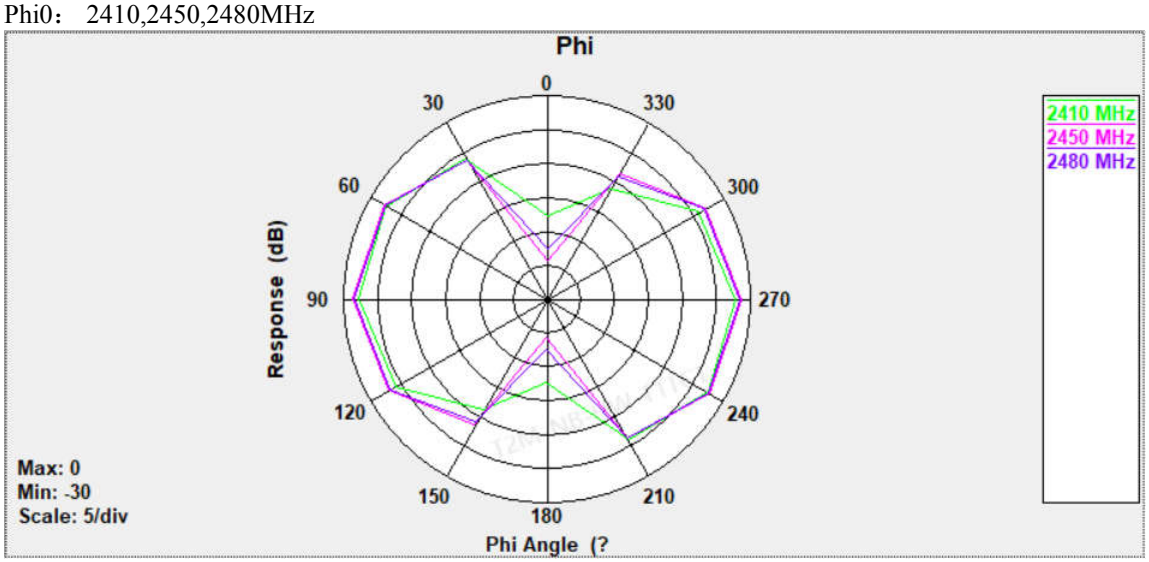
Antenna Report	
Company	Zebra Technologies Corporation
Model Name	Goose8 WWAN ROW ET45CA
Type	WLAN5GHz/2.4GHz /Bluetooth Antenna type : IFA
Support Feature ①	WLAN: BT5.1+BLE; 2.4GHz 802.11b/g/n/ac/ax HT20 5GHz 802.11a/n/ac/ax HT20/40/80
Peak Gain ②	BT: 2402~2480MHz: 1.39 dBi WLAN: ANT6: 2400~2483.5MHz: 1.39 dBi 5150~5250MHz: 1.68 dBi 5250~5350MHz: 1.68 dBi 5470~5725MHz:1.22 dBi 5725~5850MHz:1.52 dBi ANT7: 2400~2483.5MHz: 0.47 dBi 5150~5250MHz: 0.87 dBi 5250~5350MHz: 1.35 dBi 5470~5725MHz: 2.34 dBi 5725~5850MHz: 1.72 dBi

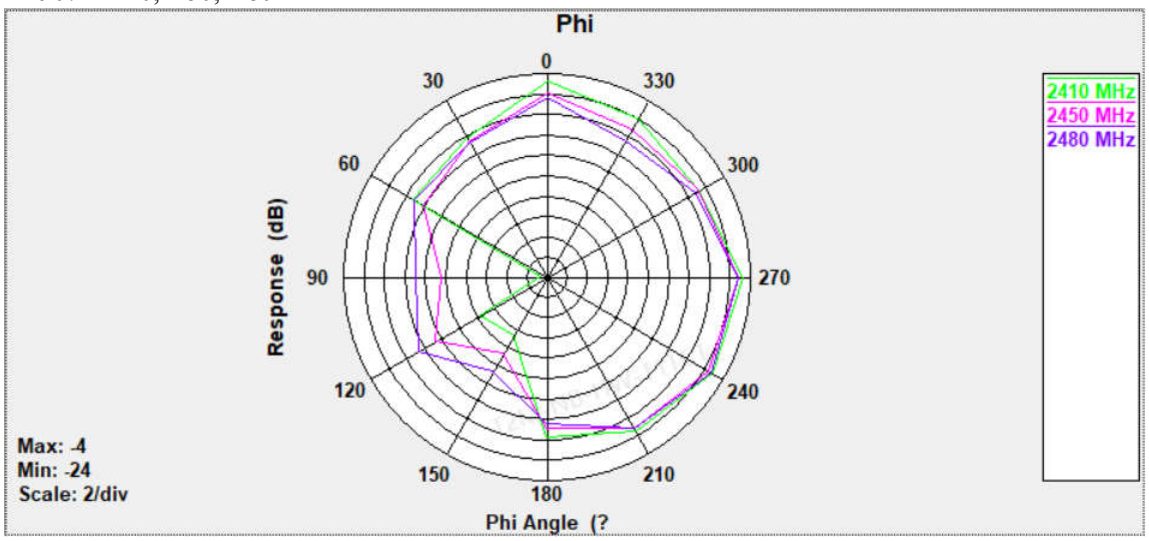
Test Site: GTS

ANT6:

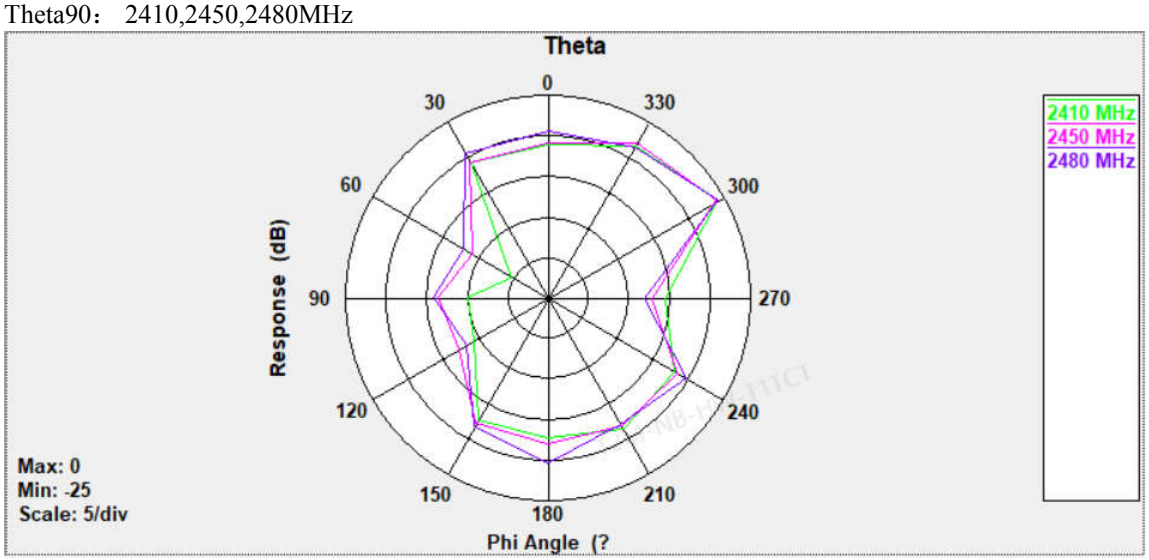
Phi0： 2410,2450,2480MHz



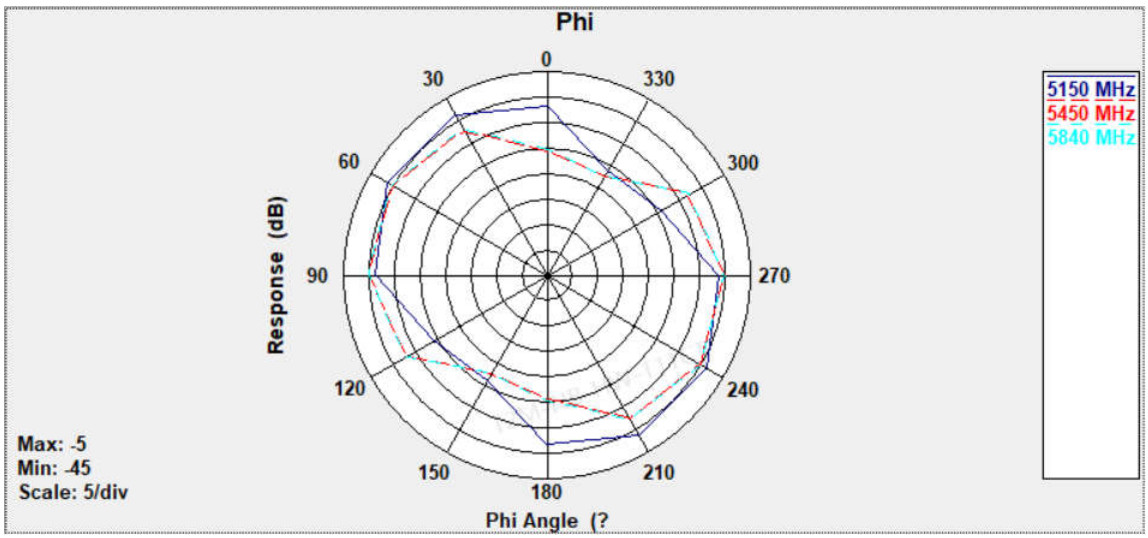
Phi90： 2410,2450,2480MHz



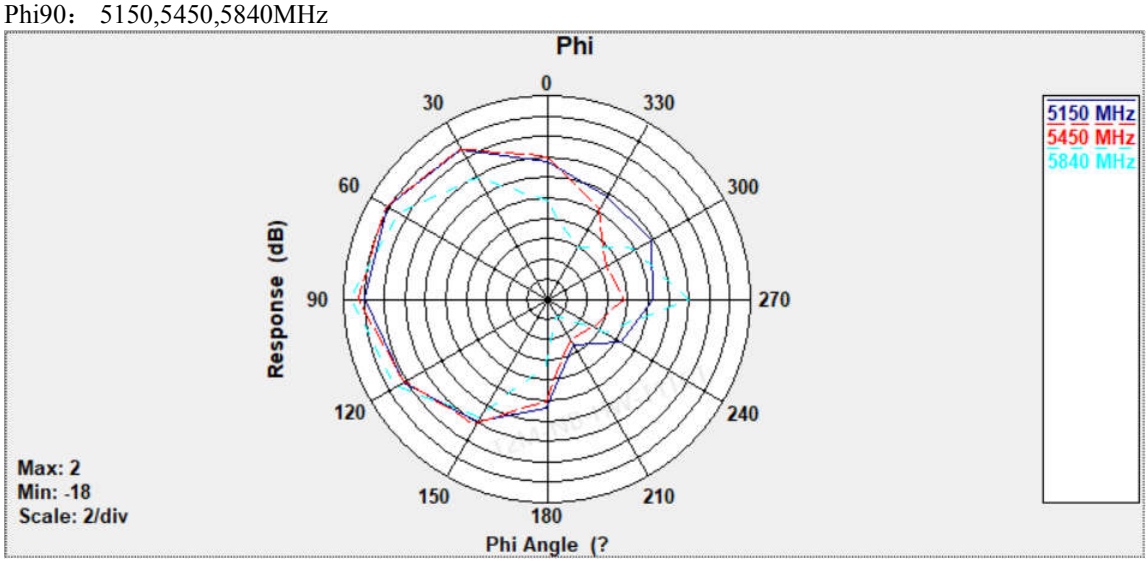
Theta90： 2410,2450,2480MHz



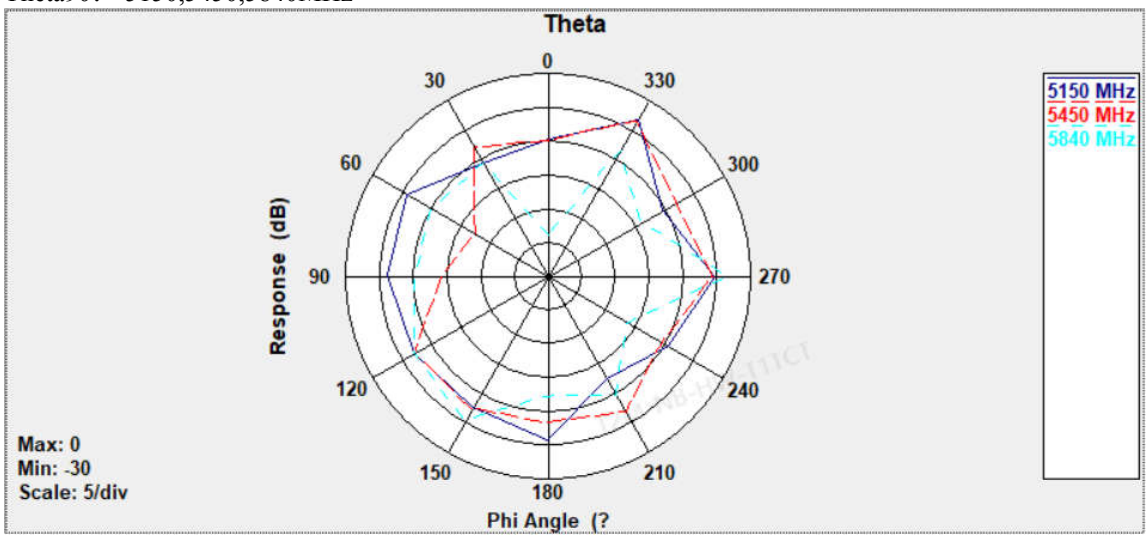
Phi0： 5150,5450,5840MHz



Phi90： 5150,5450,5840MHz

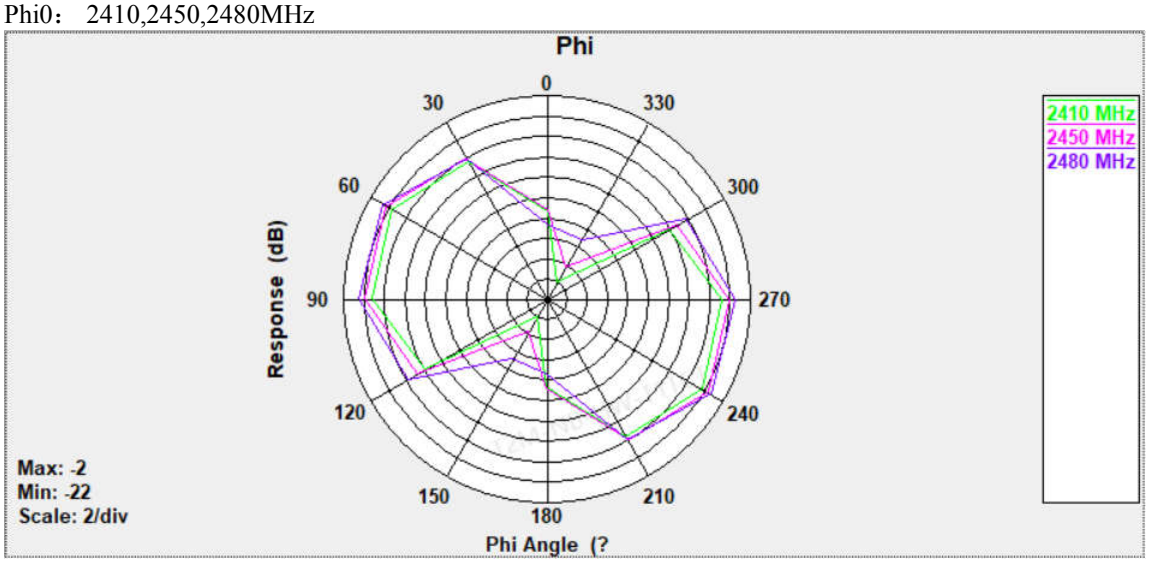


Theta90： 5150,5450,5840MHz

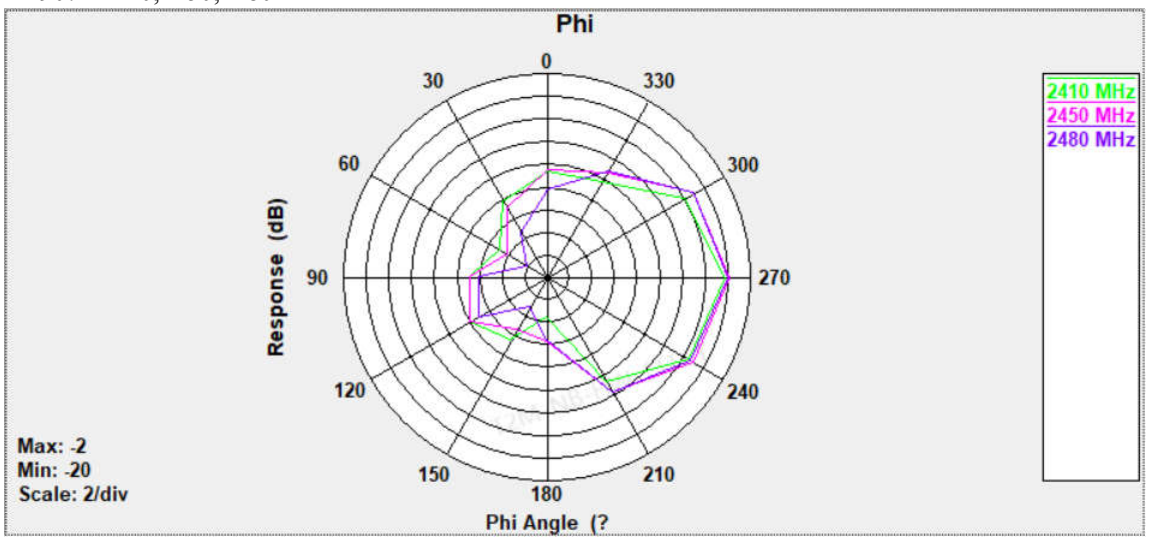


ANT7:

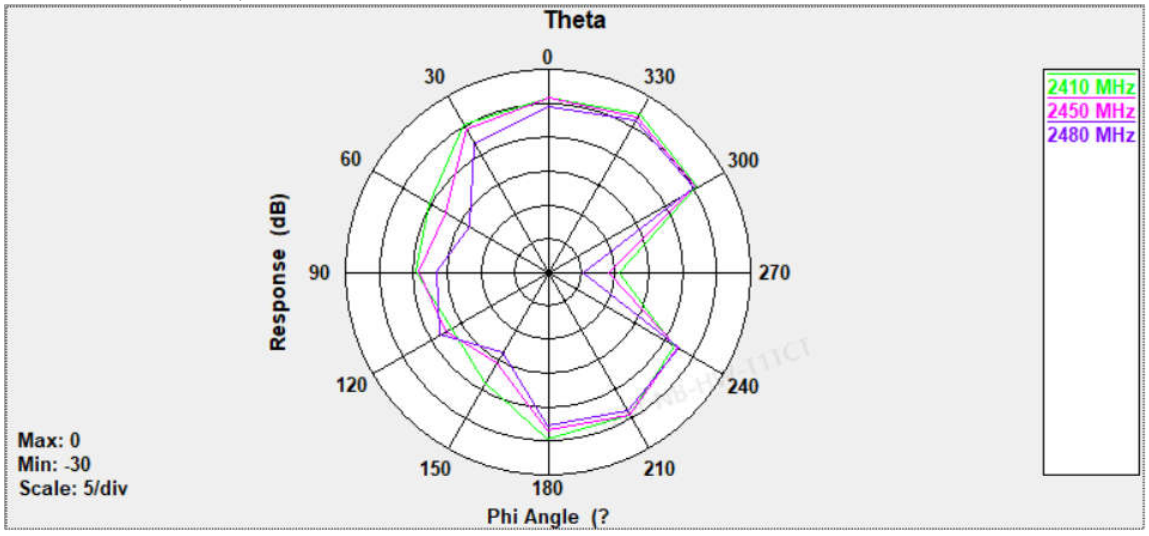
Phi0： 2410,2450,2480MHz



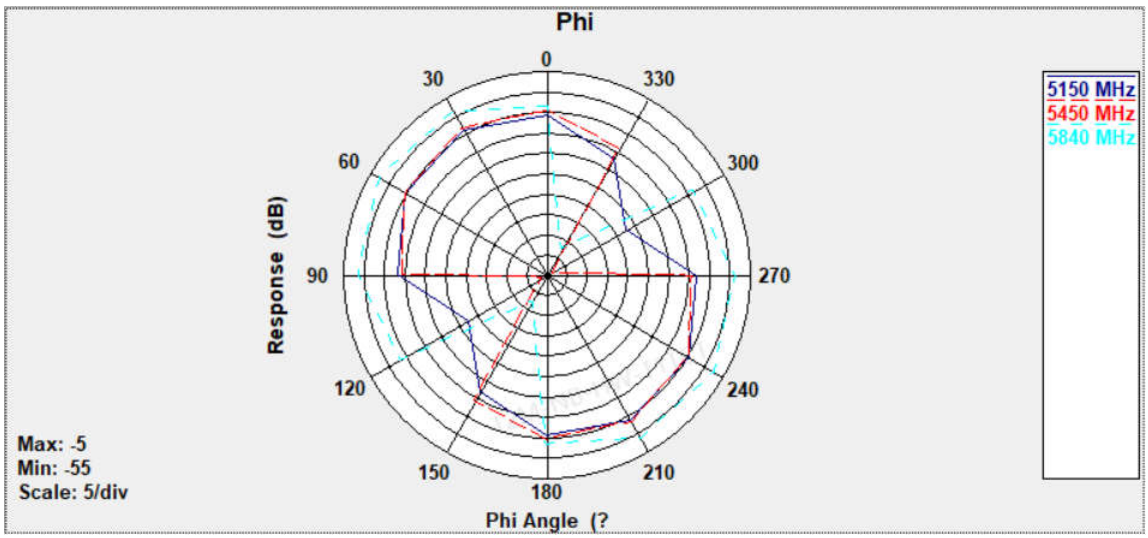
Phi90： 2410,2450,2480MHz



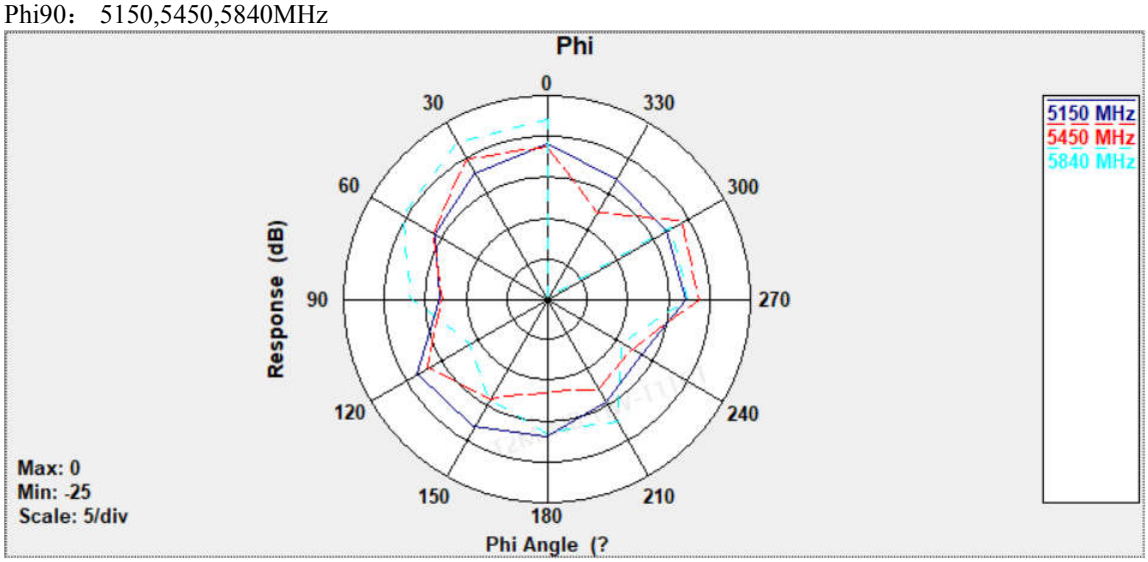
Theta90： 2410,2450,2480MHz



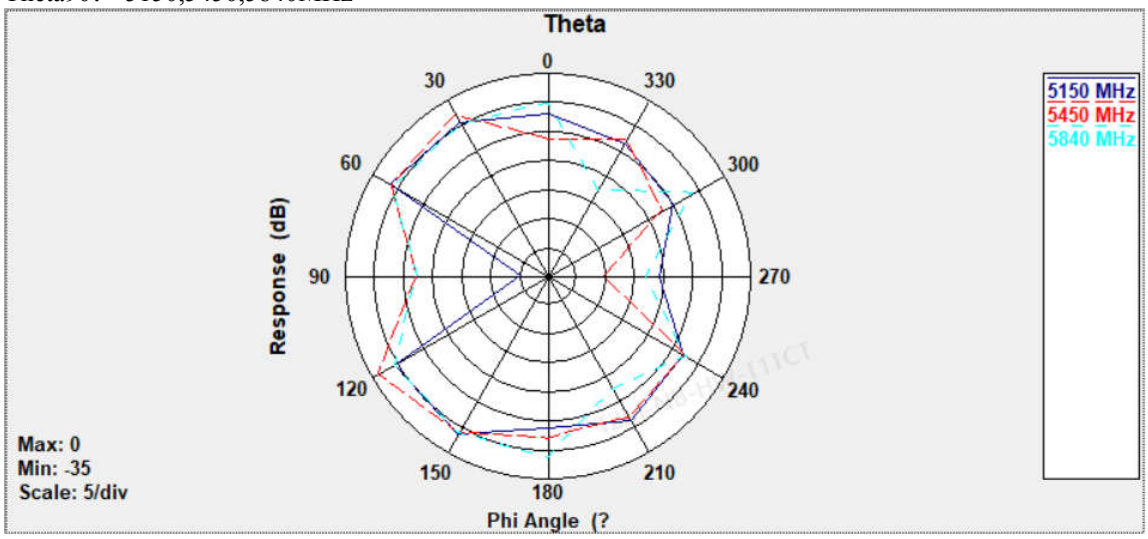
Phi0： 5150,5450,5840MHz



Phi90： 5150,5450,5840MHz



Theta90： 5150,5450,5840MHz



Antenna Report

Company	Zebra Technologies Corporation
Model Name	ET45CA
Type	Antenna type : IFA

Support Feature ①

WWAN ROW:**Antenna**	**Mode**	**Tx Band**	**Rx Band**
ANT0 TRX1-LMH	Main LB/MB/HB	GSM:GSM850/900/1800/1900 3G:UMTS B1/2/4/5/8/19 LB:B5/8/17/19/20/28 N5/8/20/28 MB: B1/2/3/4/39/66 N1/2/3/66 HB: B7/38/40/, N7/38/40	GSM:GSM850/900/1800/1900 3G: UMTS B1/2/4/5/8/19 LB: B5/8/17/19/20/28 N5/8/20/28 MB: B1/2/3/4/39/66 N1/2/3/66 HB: B7/38/40/41 N7/38/40
ANT1 DRX-LHU	LB/HB/UHB	B41, N41/77/78	LB: B5/8/17/19/20/28 N5/8/20/28 HB: B7/38/40/41 N7/38/40/41 UHB:B42/43 N77/78/79
ANT2 TRX0_LMH	LB/MB/HB	LB: B5/20 N5 MB: B1/2/3/4 N1/3 HB: B40/41, N7/38/40/41	LB: B5/20 N5 MB: B1/2/3 N1/3 HB: B7/38/40/41 N7/38/40/41
ANT3 TRX0-U_DRX-MH	MB/HB/UHB	UHB: B42/43 N77/78/79	MB: B1/2/3/4/39/66 N1/2/3/66 HB: B40 N40 UHB: B42/43 N77/78/79
ANT4 PM-MHU	MB/HB/UHB	B41, N41/77/78	MHB:B1/2/3/4/7/38/40/41/66 N1/2/3/7/38/40/41/66 UHB: B42/43 N77/78/79
ANT5 DM-MH_DRX-L	LB/MB/HB/UHB	B41, N41/77/78	LB:B5/26 N5 MHB: B1/2/3/4/7/38/41/66 N1/2/3/7/38/41/66 UHB: B42/43 N77/78/79
ANT6	WIFI/BT	BT/WIFI(2.4G/5G)	BT/WIFI(2.4G/5G)
ANT7	WIFI/GPS	WIFI(2.4G/5G)	WIFI(2.4G/5G) GPS L5
ANT8	GPS		GPS L1
ANT9	NFC	NFC	NFC

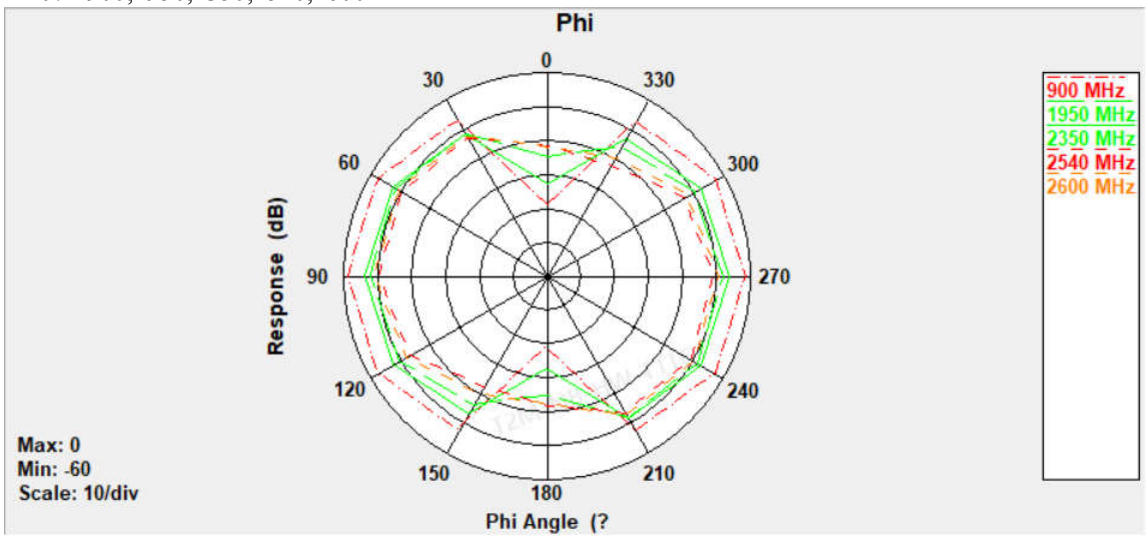
Peak Gain ②

	Ant0	Ant1	Ant2	Ant3	Ant4	Ant5
FDD 1/5G N1: EU, JP, Korea	1.9		2.3			
FDD 2/ 5G N2 (1850-1910 MHz): US	0.7		0.4			
FDD 3 /5G N3: EU, TW, JP 1710~1785	0.7		1.7			
FDD 4(1710-1755 MHz): US	0.7		-2.4			
FDD 5,5G N5 (824-849 MHz): US	0.4		-1.5			
FDD 6: JP 830-840	0.4					
FDD 7,5G N7 (2500-2570 MHz): EU	0.6		2.0			
FDD 8,5G N8: EU, JP 880-915	0.0					
FDD 17(704-716 MHz): US	-1.0					
FDD 19: JP 830-845	0.4					
FDD 20,5G N20: EU 832-862	0.4		-2.4			
FDD 28,5G N28: TW, JP 703-748	-1.0					
FDD 66 /5G N66,: 1710-1780	0.7					
TDD 38/5G N38:: US, EU, China 2570-2620	0.6		1			
TDD 39: 1880-1920	0.6					
TDD 40 /5G N40: US, EU, China 2300-2400	0.6		2.7			
TDD 41 /5G N41: US, JP Full band 2496-2690		SRS peak gain -1	2.0		SRS peak gain -1.4	SRS peak gain -1.9
TDD 42: EU 3400-3600				0.3		
TDD 43: US, EU 3600-3800				0.4		
n77(3300-3550 MHz)		SRS peak gain -1		SRS peak gain 0.3	SRS peak gain 0.4	SRS peak gain 0.2
n77(3551-3750 MHz)				SRS peak gain 0.4		
n77(3751-4200 MHz)				SRS peak gain 0.5		
n78(3300-3550 MHz)		SRS peak gain -1		SRS peak gain 0.3	SRS peak gain 0.4	SRS peak gain 0.2
n78(3551-3750 MHz)				SRS peak gain 0.4		
n78(3751-4200 MHz)				SRS peak gain 0.5		
n79 4400~5000		SRS peak gain -0.2		0.4	SRS peak gain 0.4	SRS peak gain -1.2
1710~1755 MHz(WCDMA band 4)	0.7					
880~915 MHz(GSM 900, WCDMA band 8)	0.0					
1710-1785 MHz(GSM 1800, WCDMA band 3)	0.7					
1920-1980 MHz(WCDMA band 1)	1.9					
1850-1910 MHz(GSM 1900, WCDMA B 2)	0.7		ENDC peak gain 0.4			
830-845 MHz (WCDMA B19)	0.4					

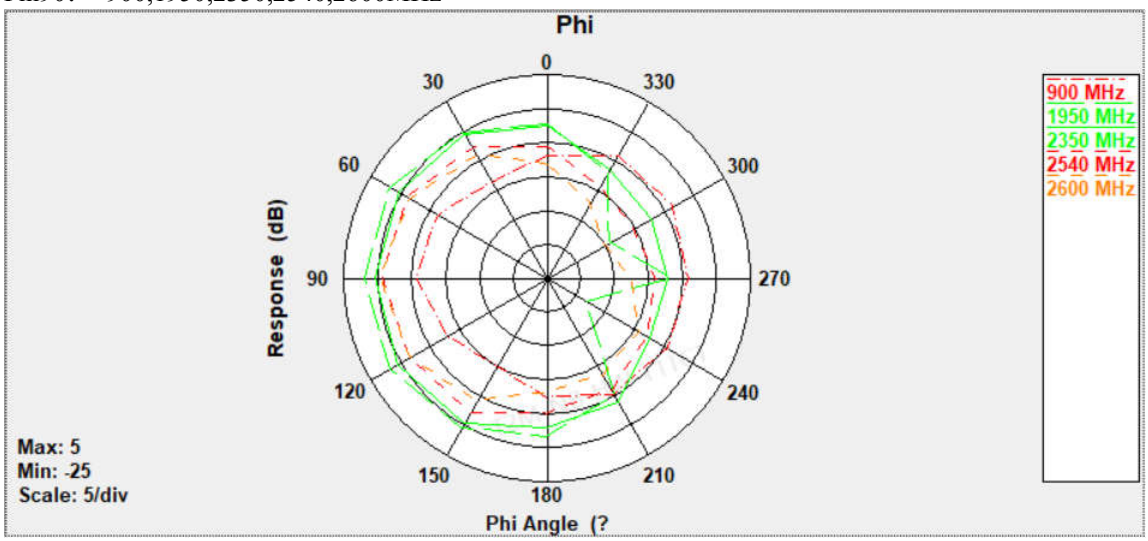
Test Site: SATIMO

ANT0:

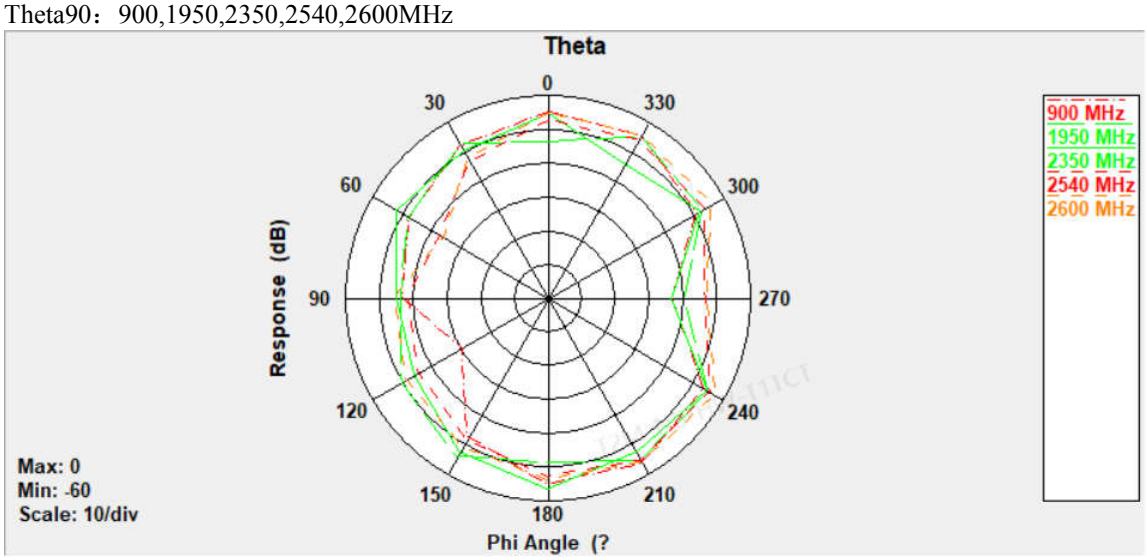
Phi0： 900,1950,2350,2540,2600MHz



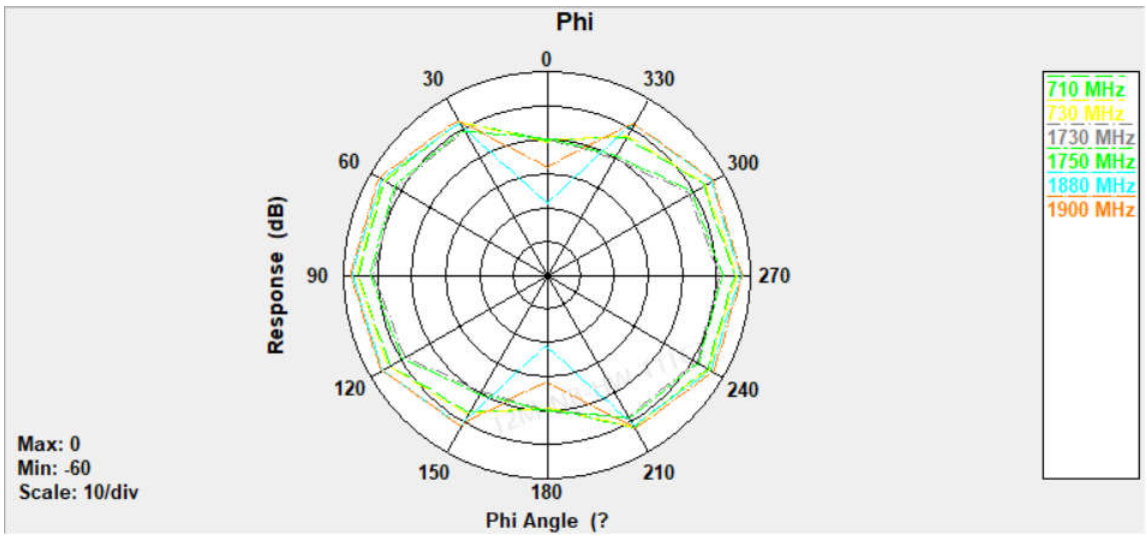
Phi90： 900,1950,2350,2540,2600MHz



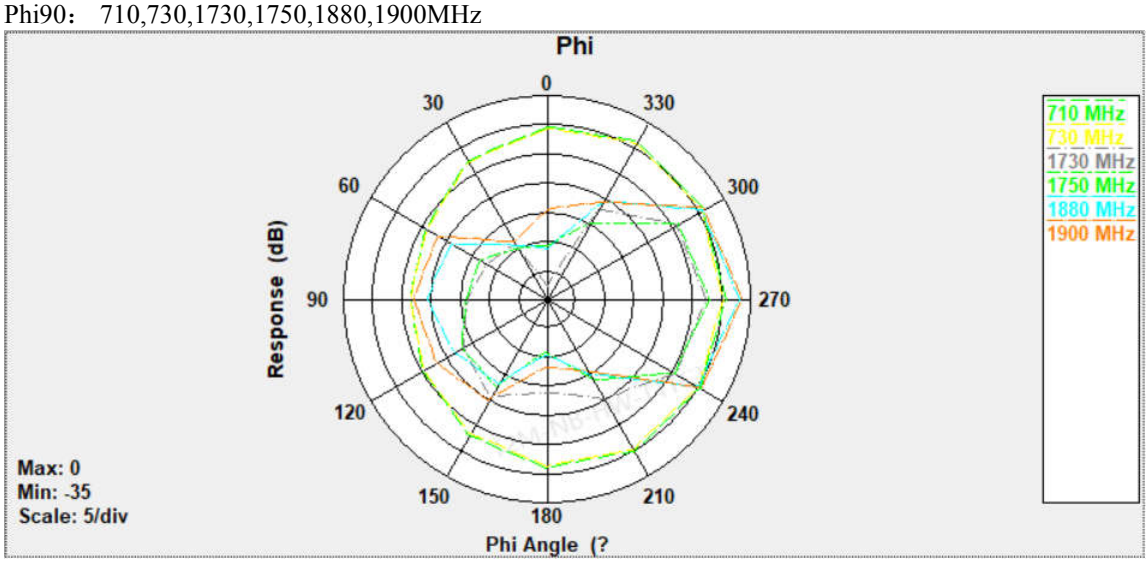
Theta90：900,1950,2350,2540,2600MHz



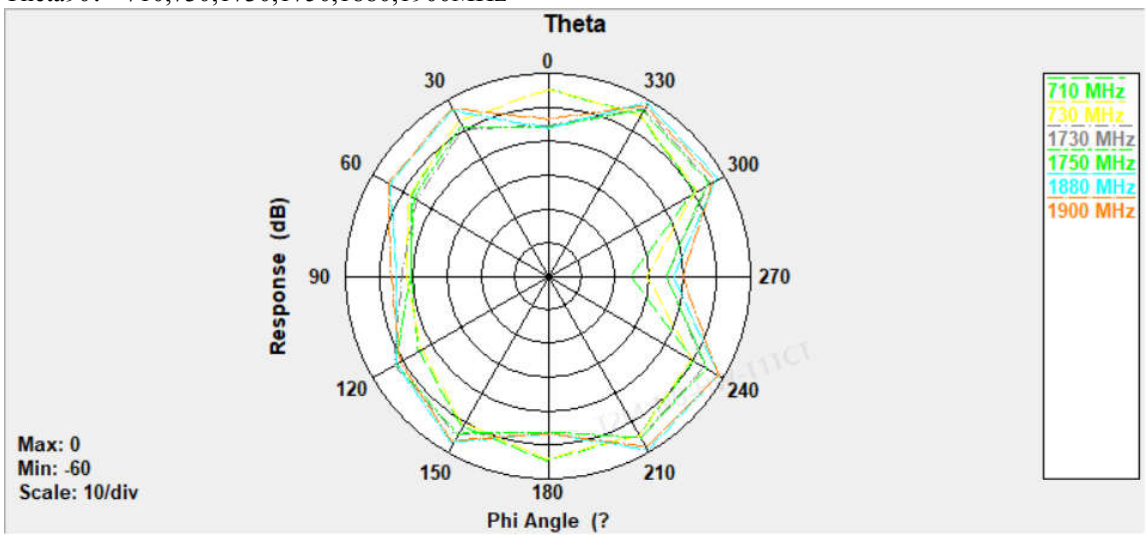
Phi0： 710,730,1730,1750,1880,1900MHz



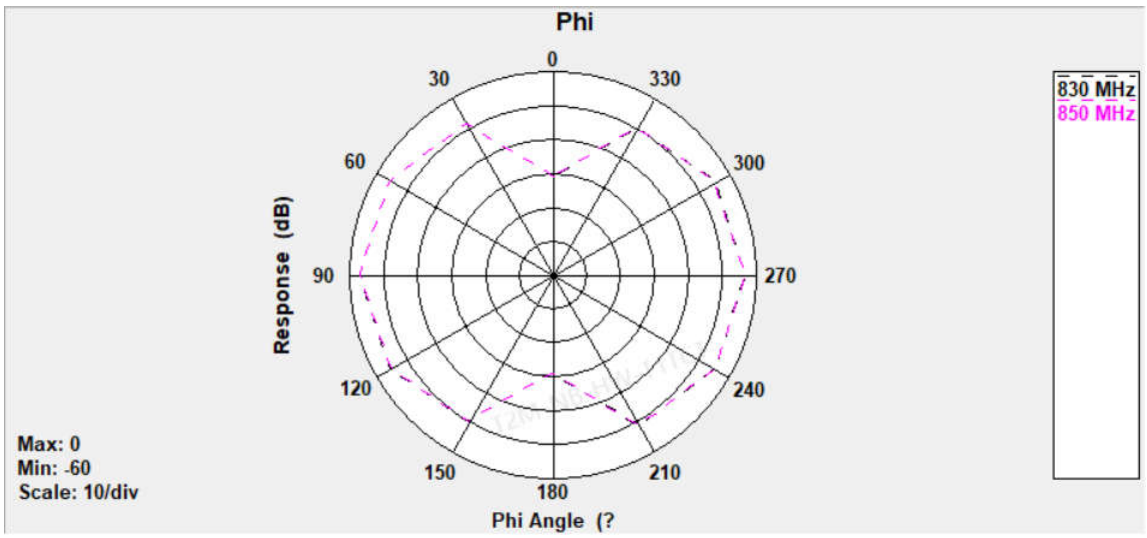
Phi90： 710,730,1730,1750,1880,1900MHz



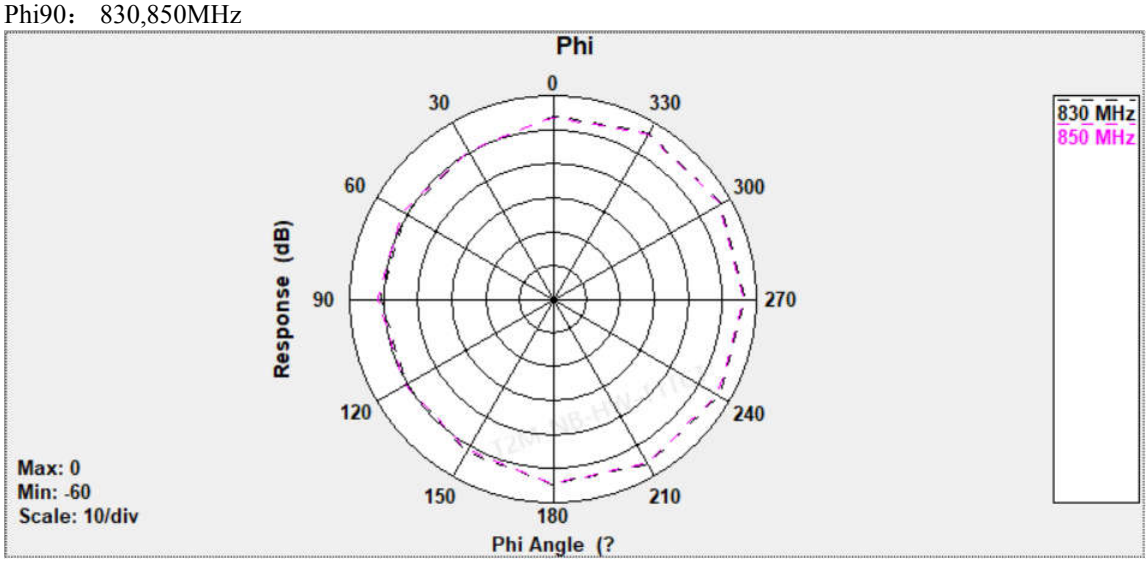
Theta90： 710,730,1730,1750,1880,1900MHz



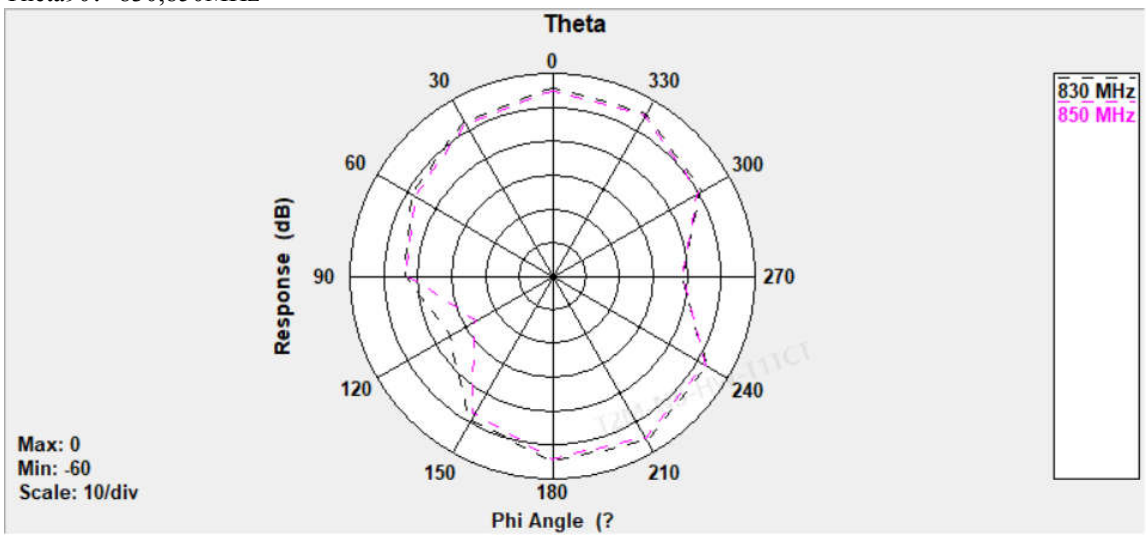
Phi0： 830,850MHz



Phi90： 830,850MHz

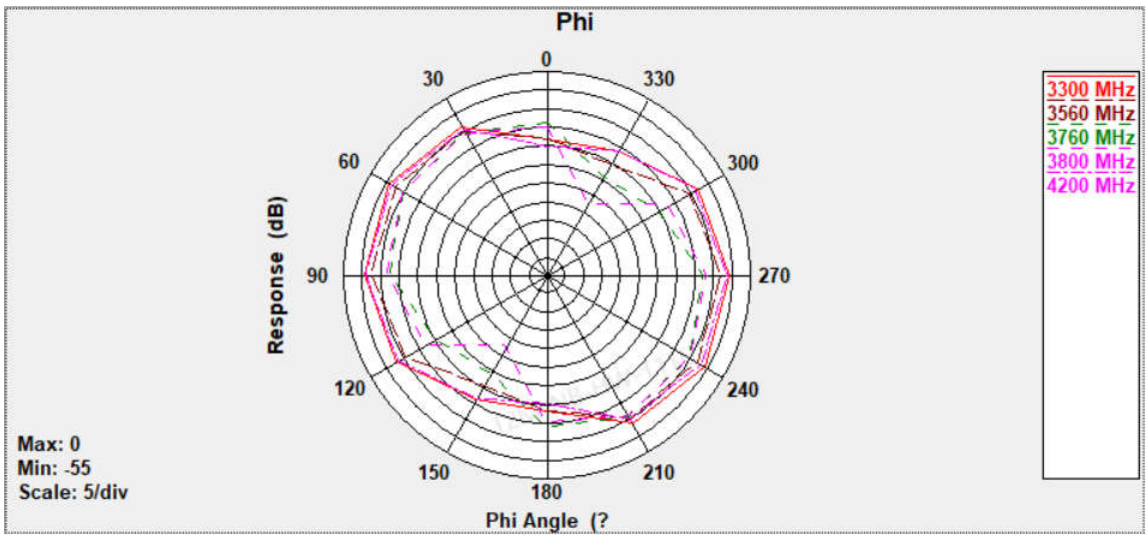


Theta90：830,850MHz

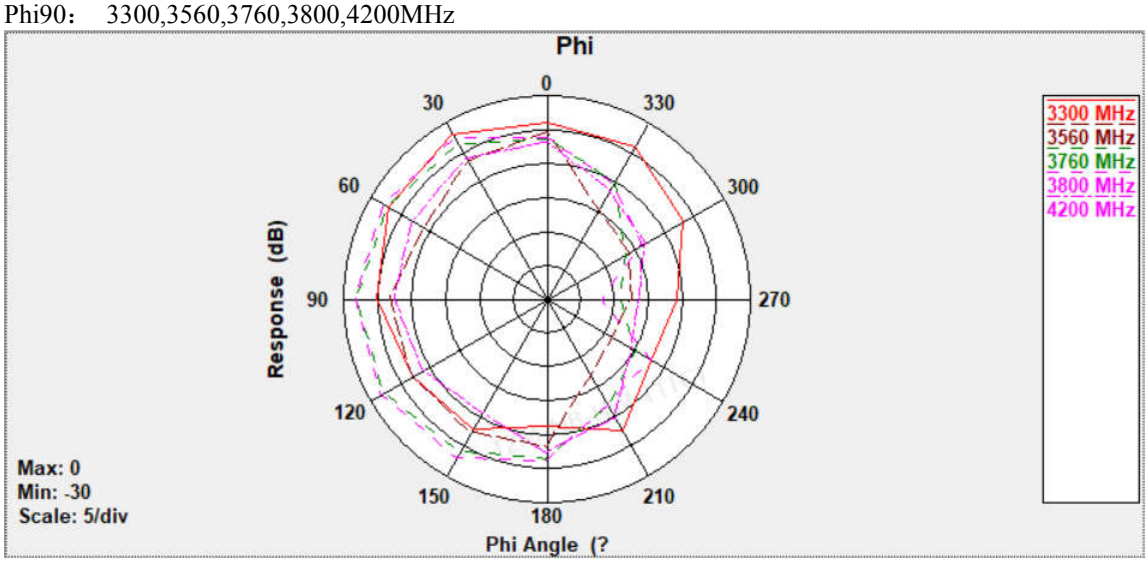


ANT1:

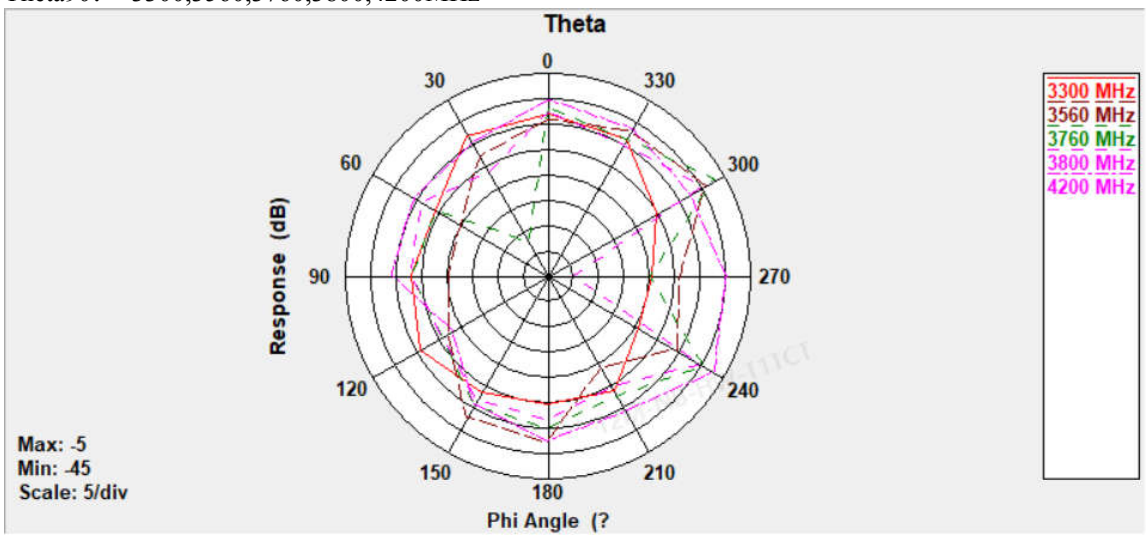
Phi0： 3300,3560,3760,3800,4200MHz



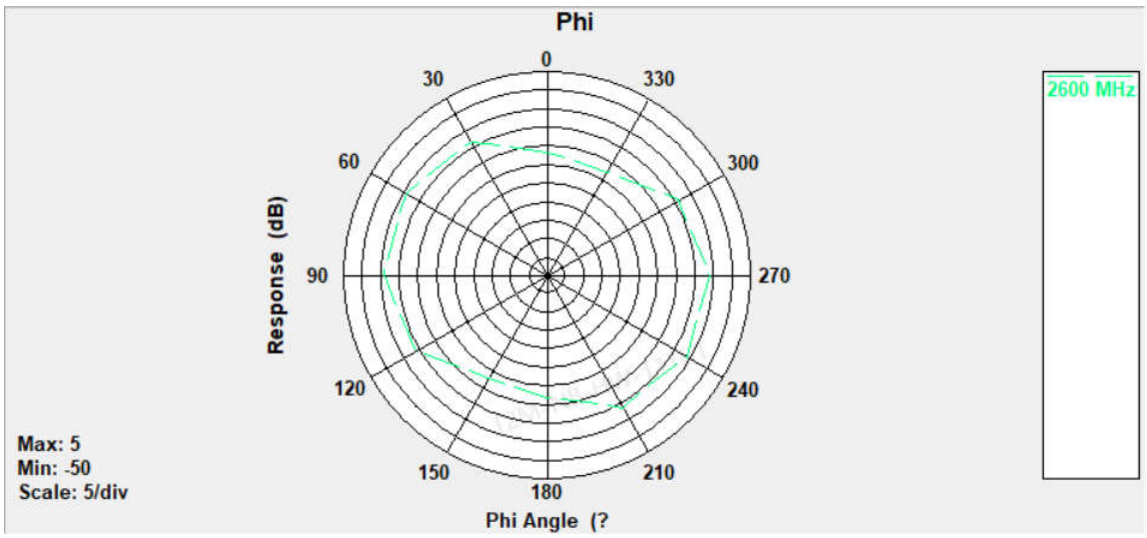
Phi90： 3300,3560,3760,3800,4200MHz



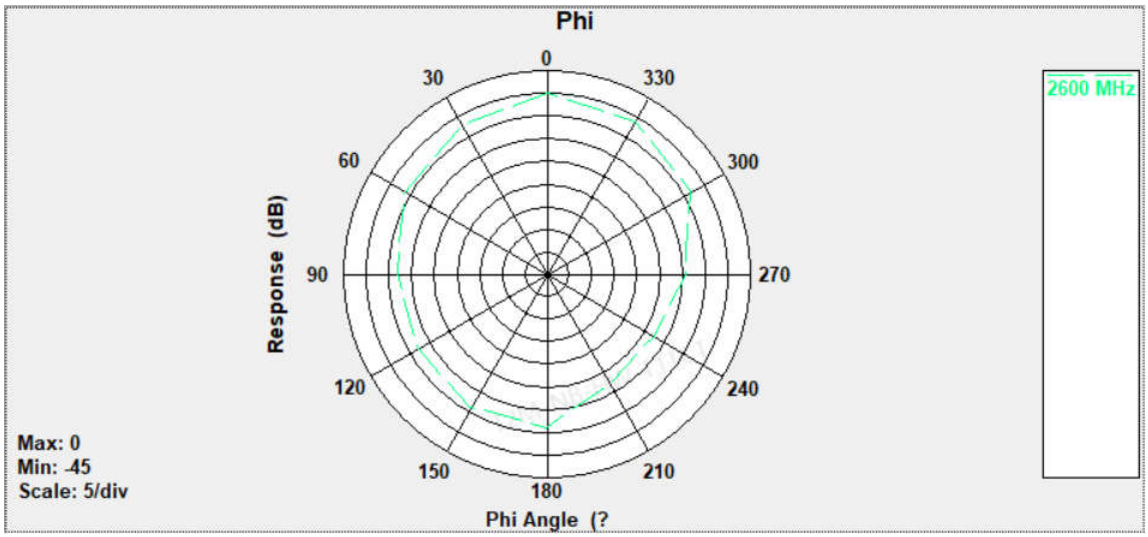
Theta90： 3300,3560,3760,3800,4200MHz



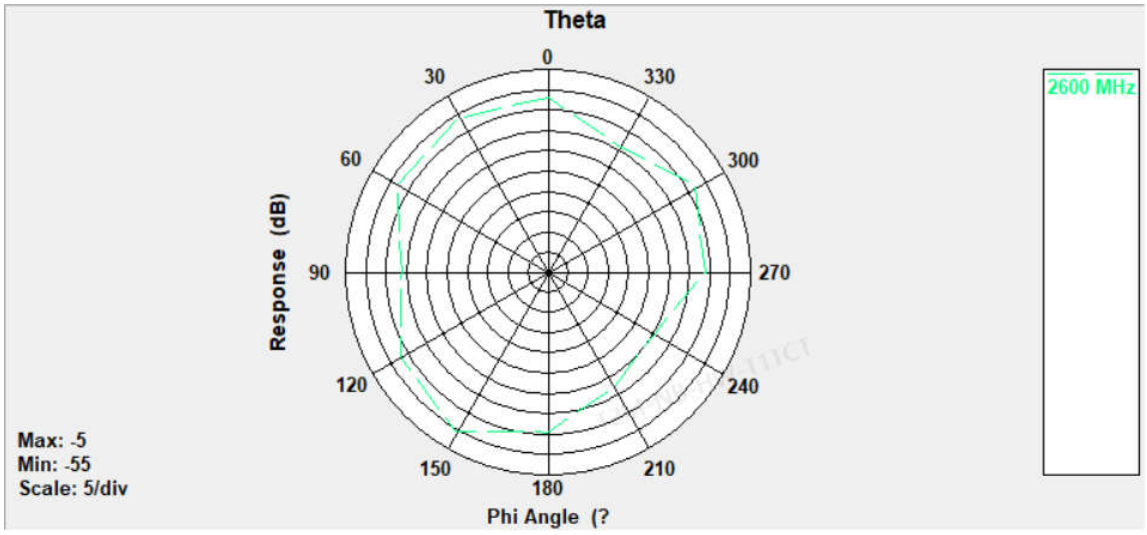
Phi0：2600MHz



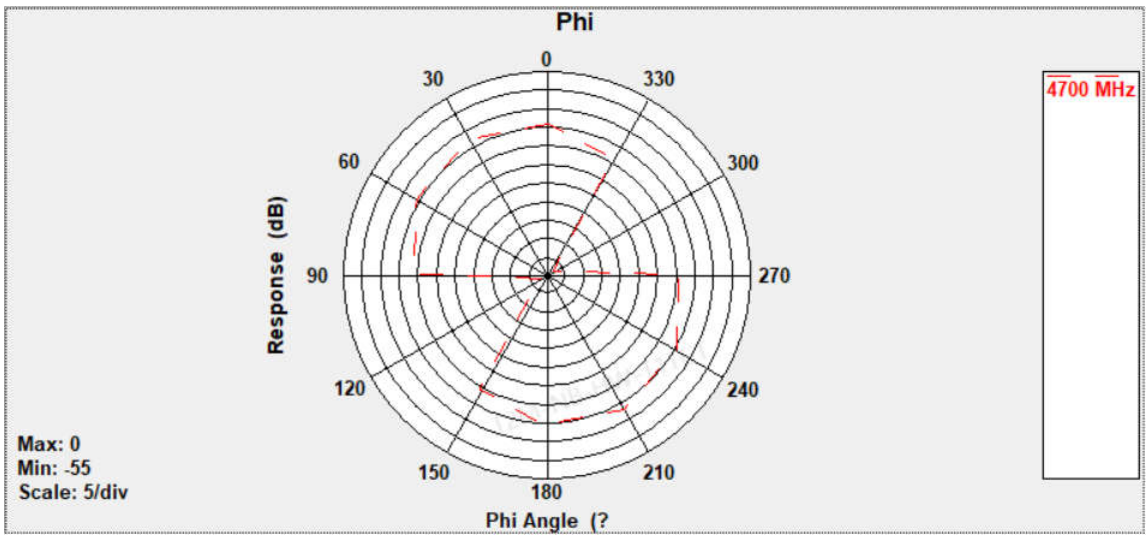
Phi90：2600MHz



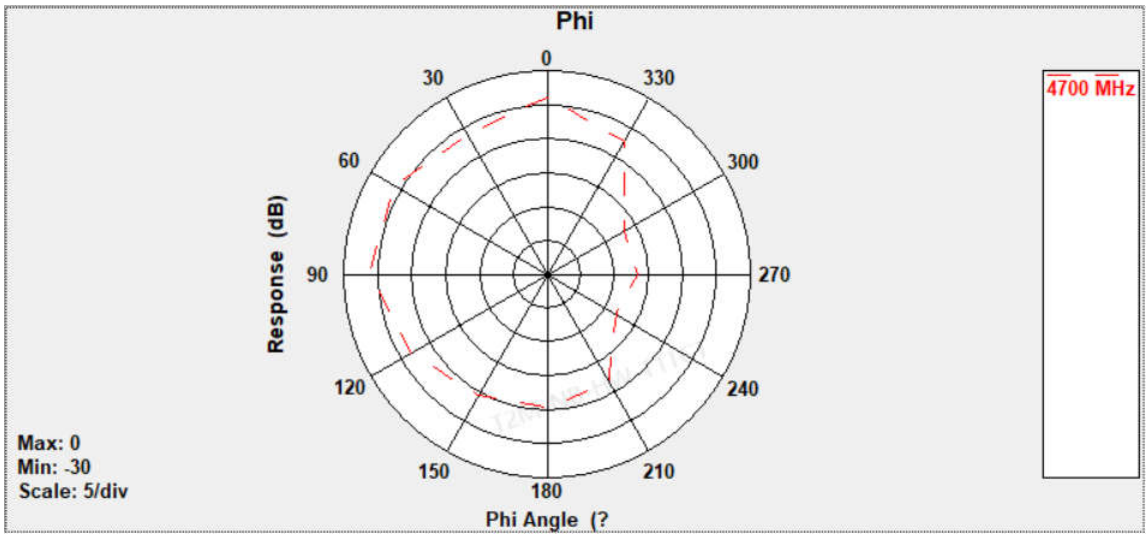
Theta90： 2600MHz



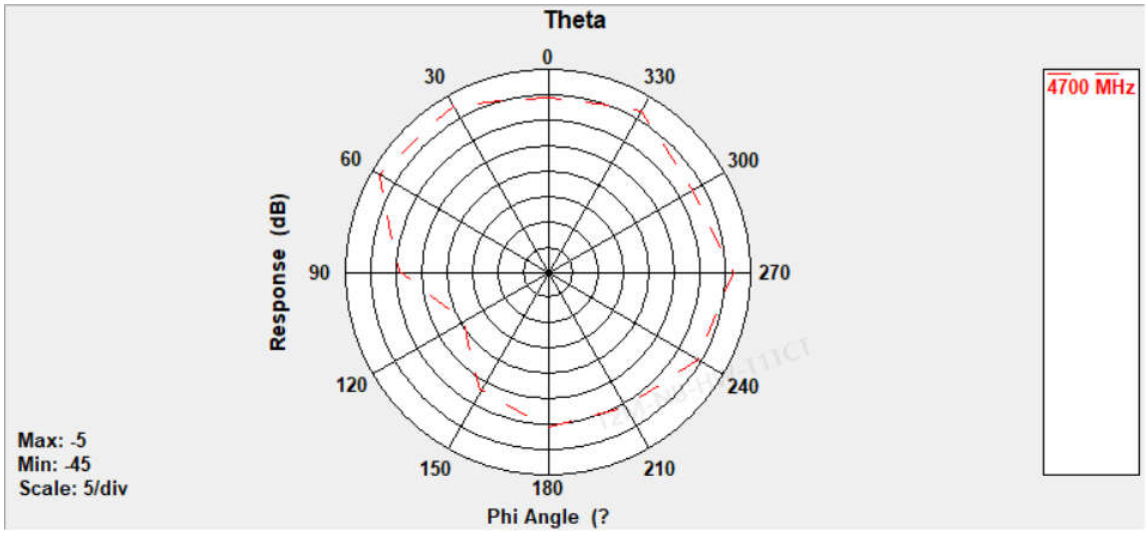
Phi0：4700MHz



Phi90：4700MHz

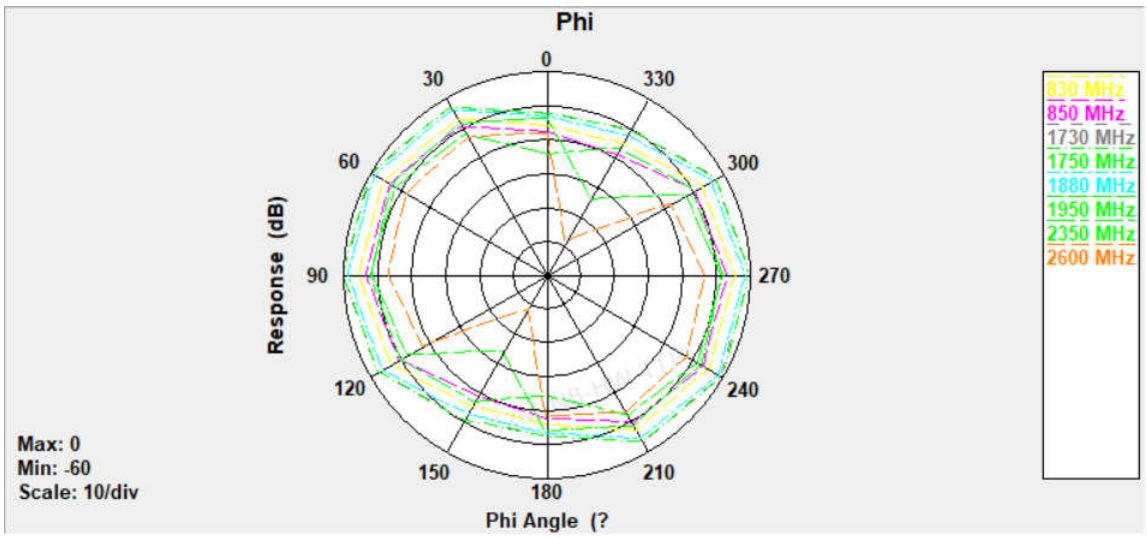


Theta90： 4700MHz

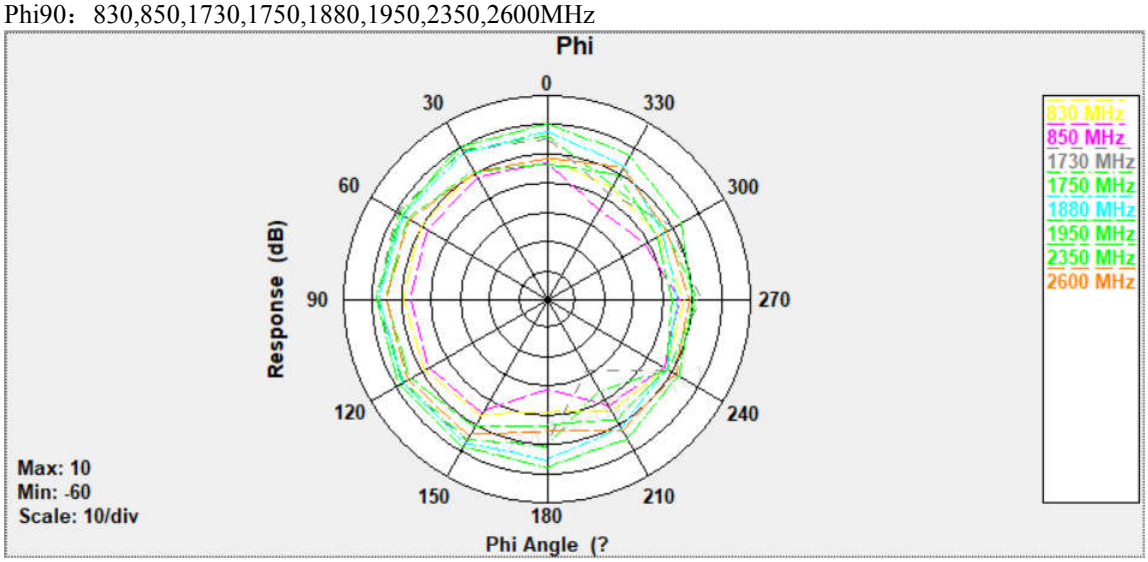


ANT2:

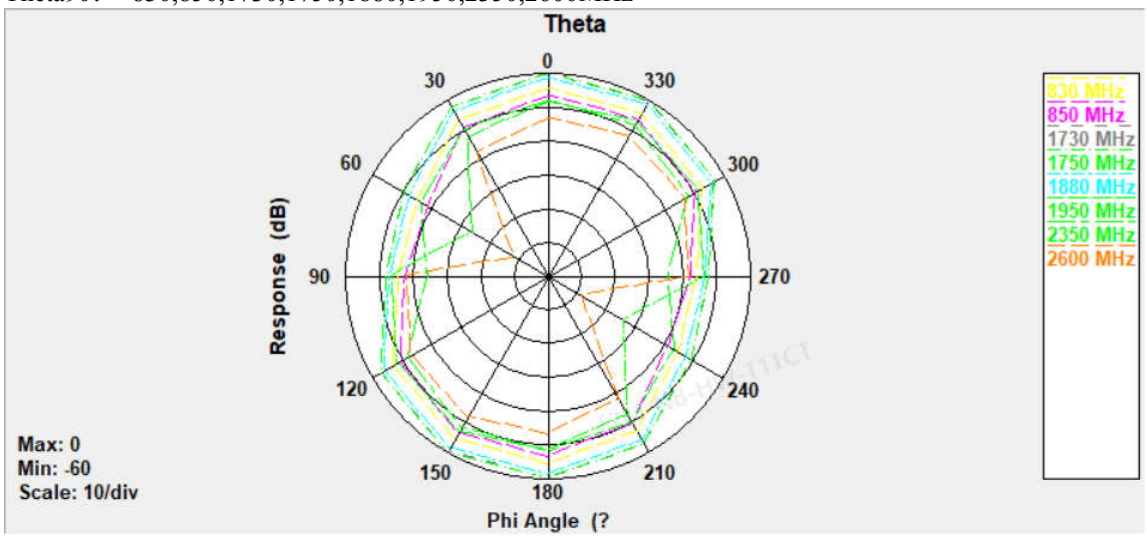
Phi0： 830,850,1730,1750,1880,1950,2350,2600MHz



Phi90：830,850,1730,1750,1880,1950,2350,2600MHz

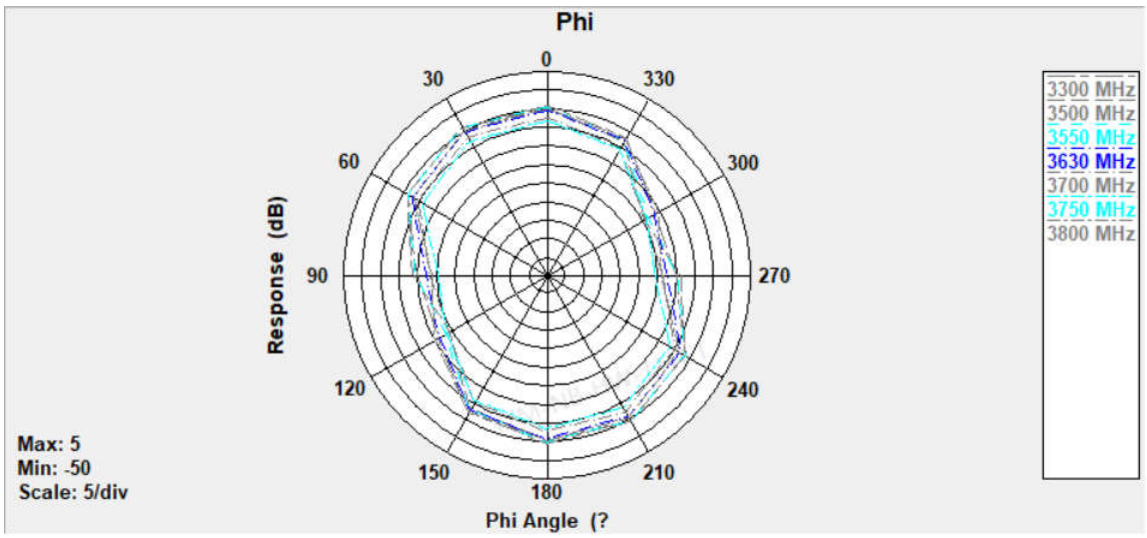


Theta90： 830,850,1730,1750,1880,1950,2350,2600MHz

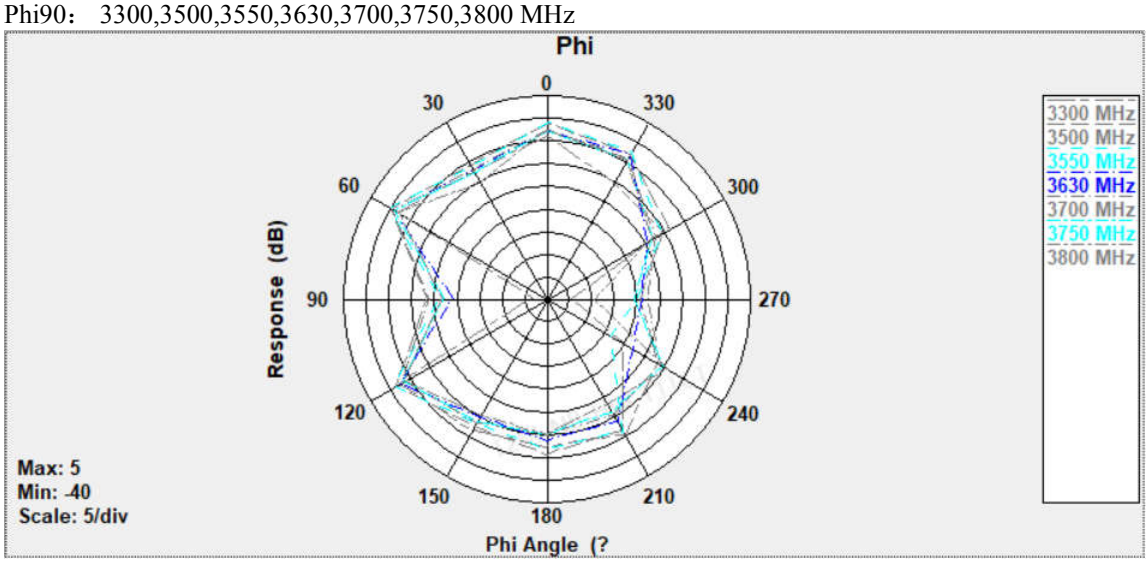


ANT3:

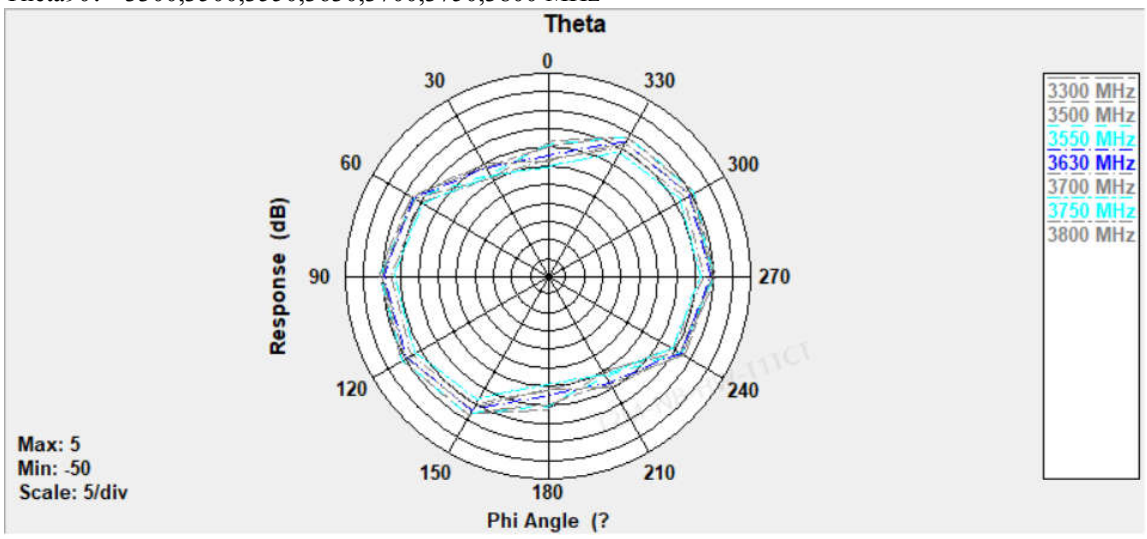
Phi0： 3300,3500,3550,3630,3700,3750,3800 MHz



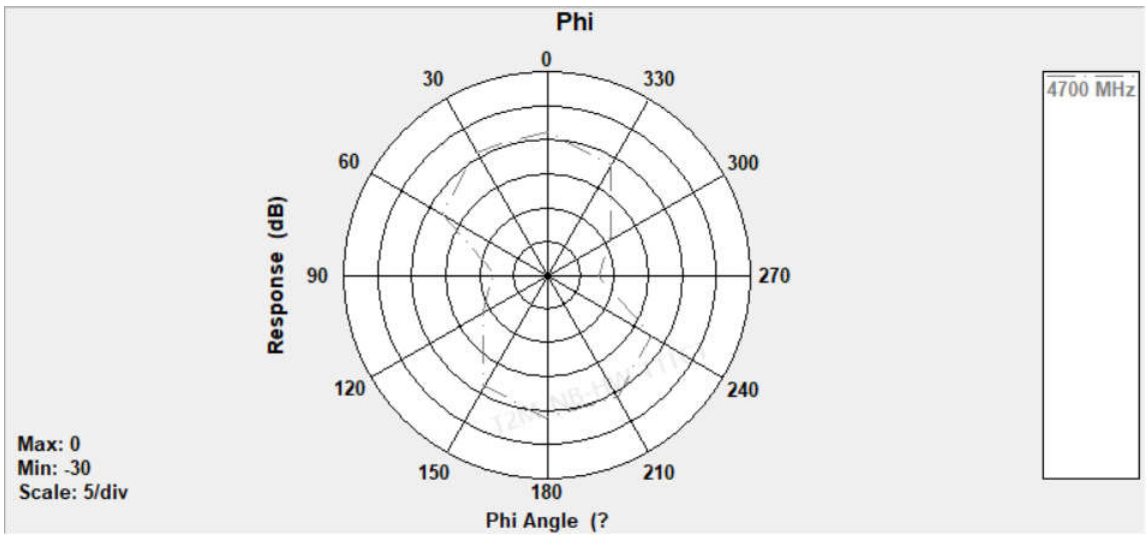
Phi90： 3300,3500,3550,3630,3700,3750,3800 MHz



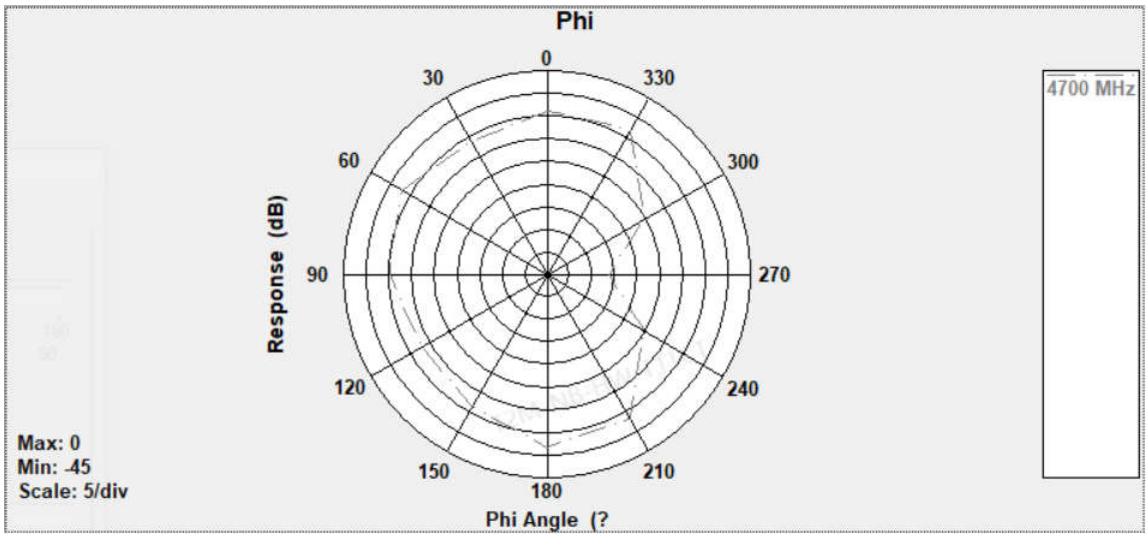
Theta90： 3300,3500,3550,3630,3700,3750,3800 MHz



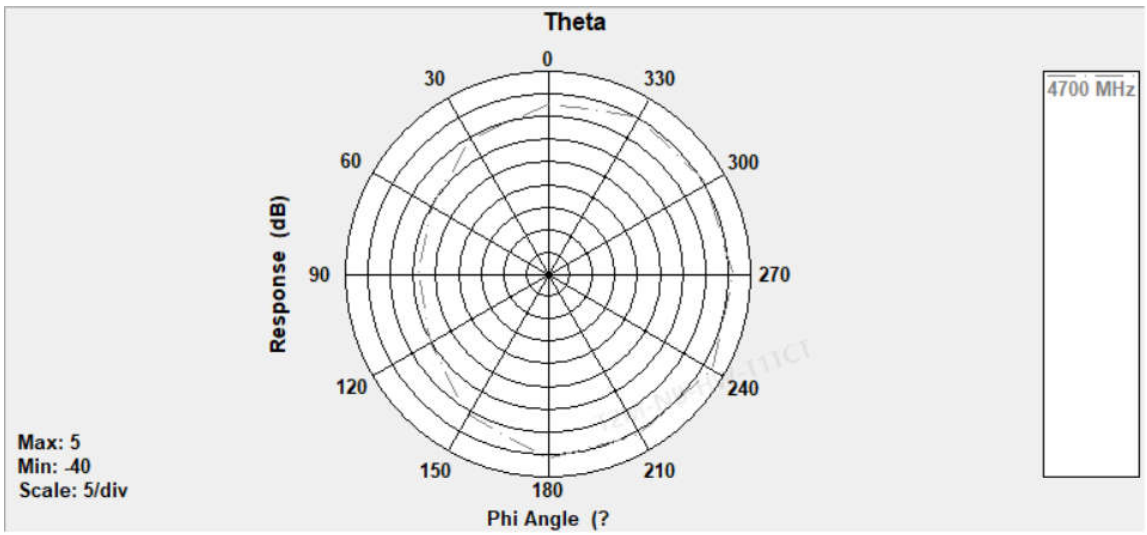
Phi0： 4700MHz



Phi90： 4700MHz

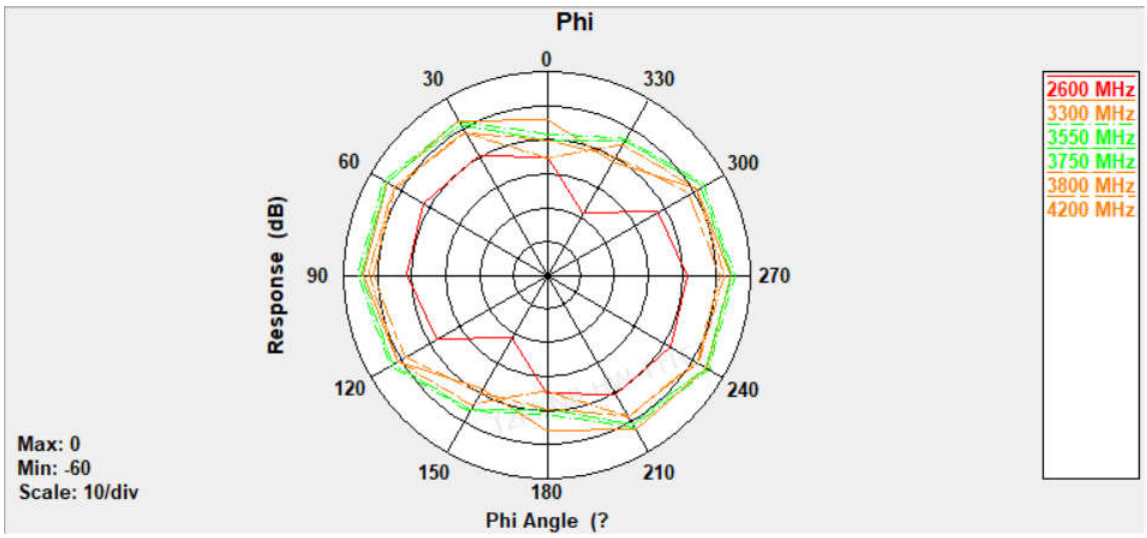


Theta90： 4700MHz

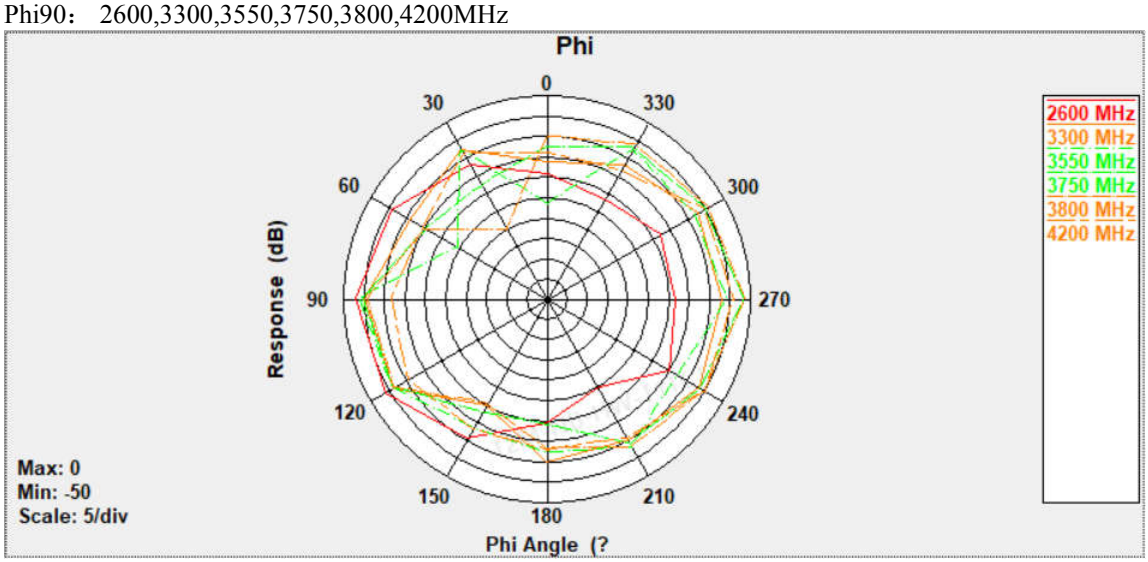


ANT4:

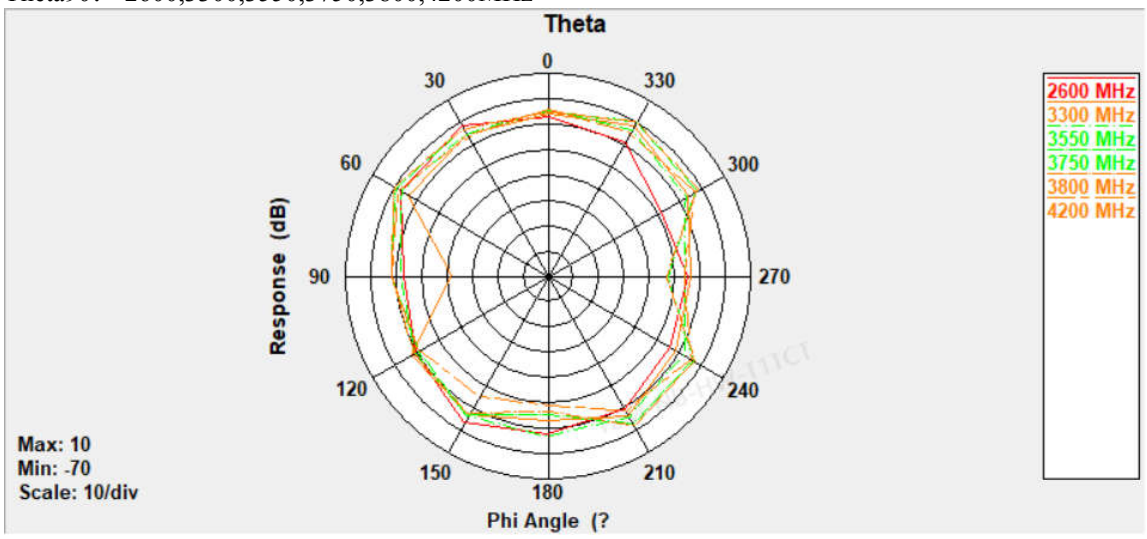
Phi0：2600,3300,3550,3750,3800,4200MHz



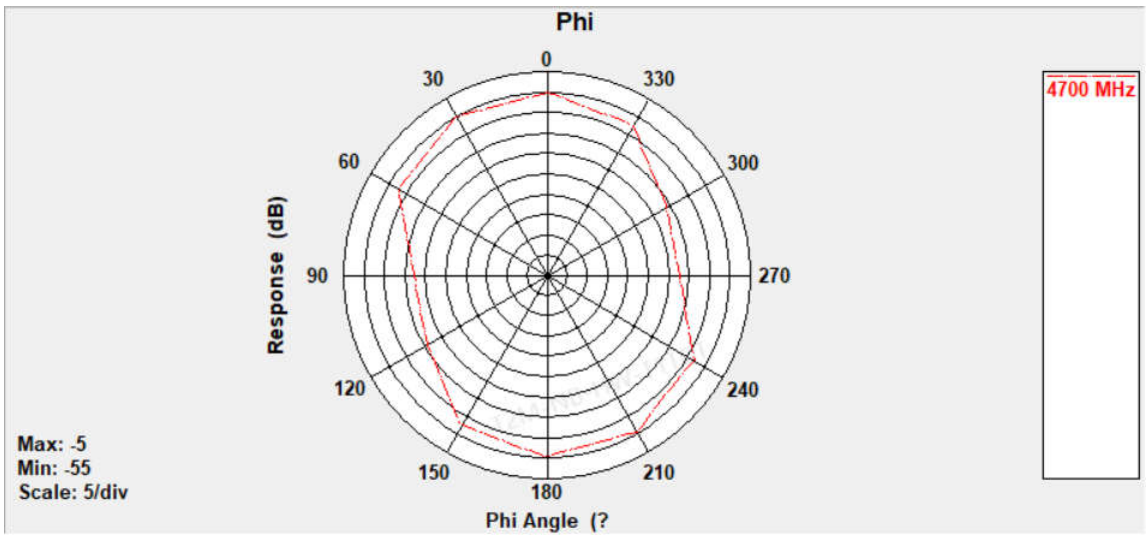
Phi90： 2600,3300,3550,3750,3800,4200MHz



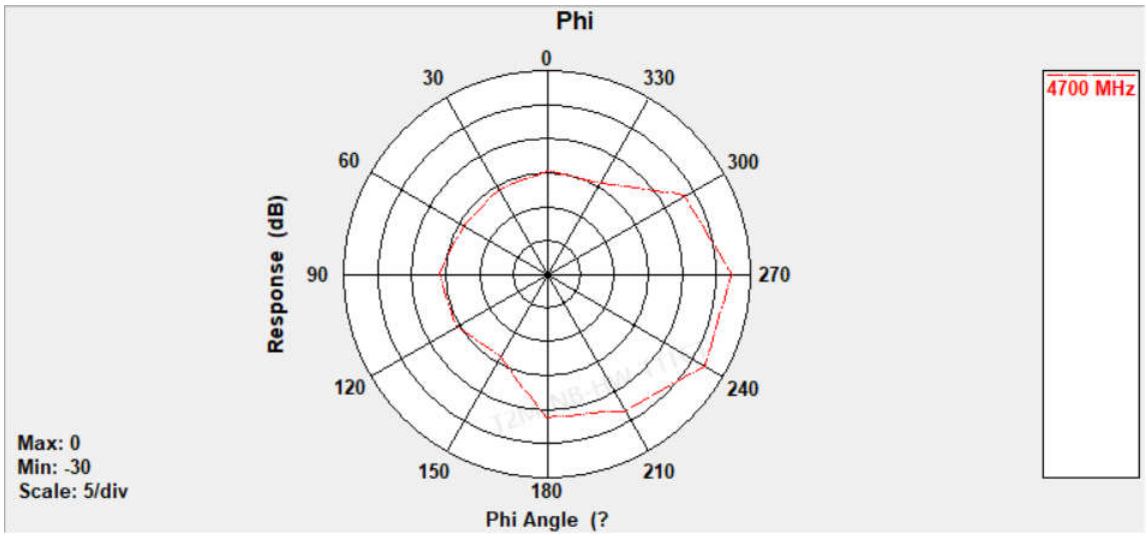
Theta90： 2600,3300,3550,3750,3800,4200MHz



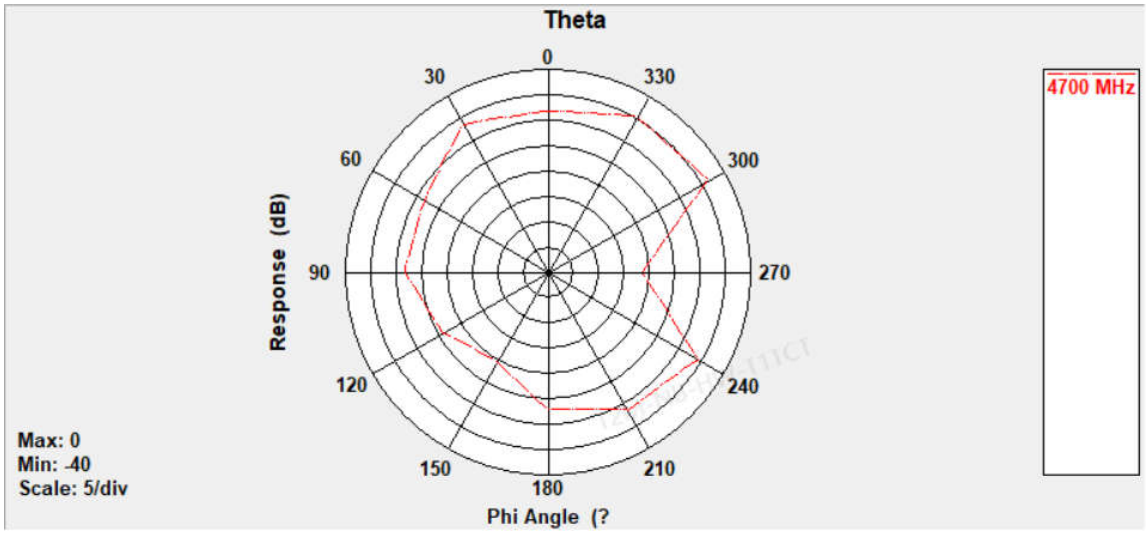
Phi0： 4700MHz



Phi90： 4700MHz

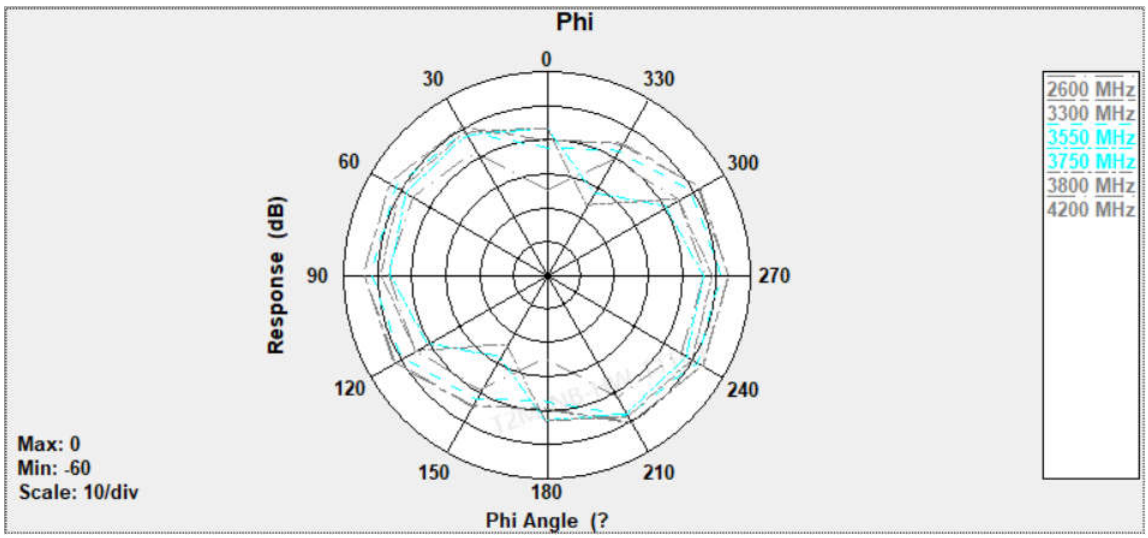


Theta90： 4700MHz

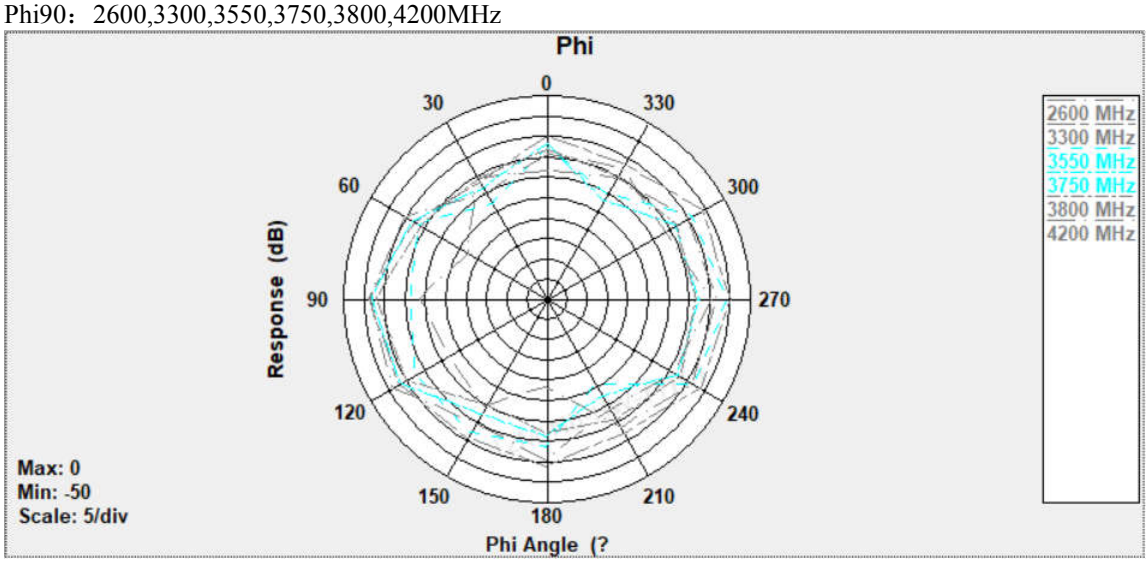


ANT5:

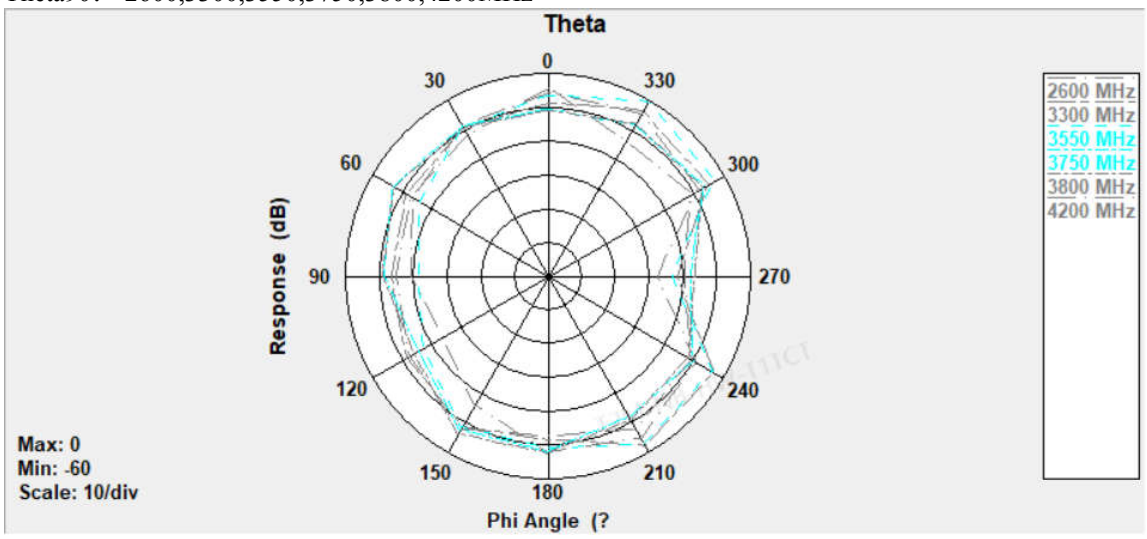
Phi0： 2600,3300,3550,3750,3800,4200MHz



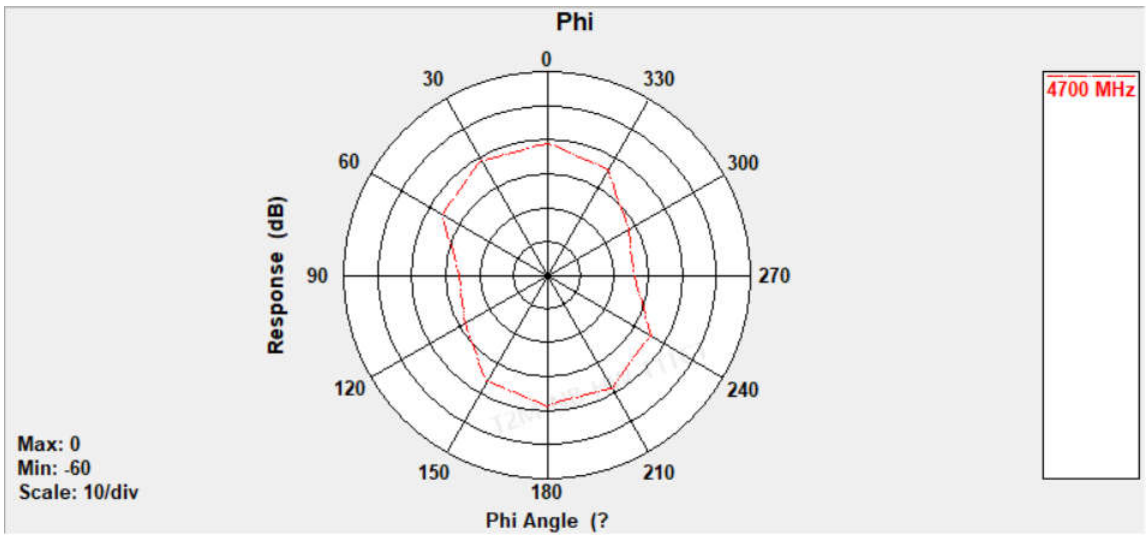
Phi90：2600,3300,3550,3750,3800,4200MHz



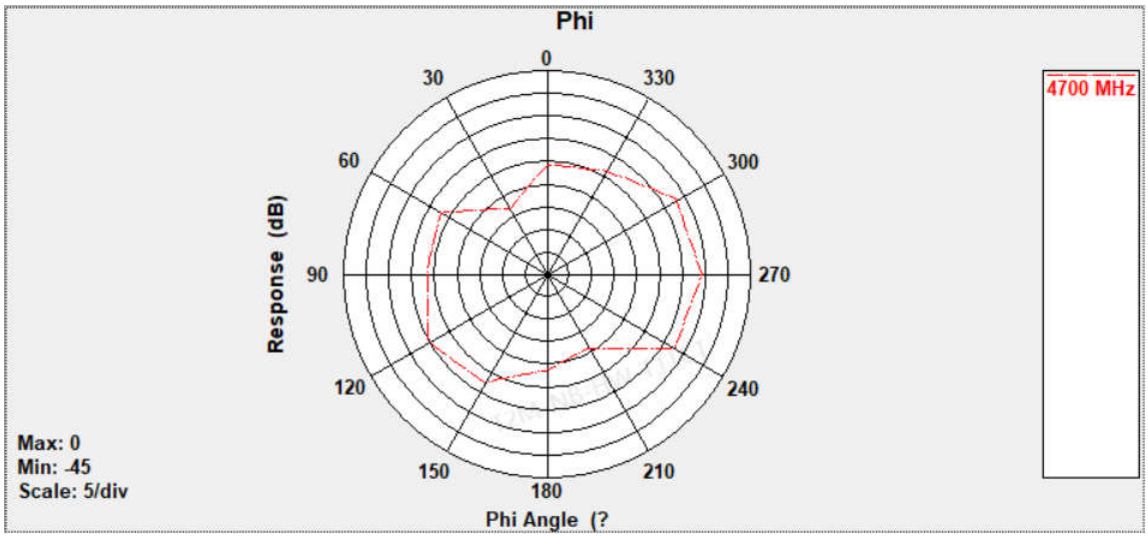
Theta90： 2600,3300,3550,3750,3800,4200MHz



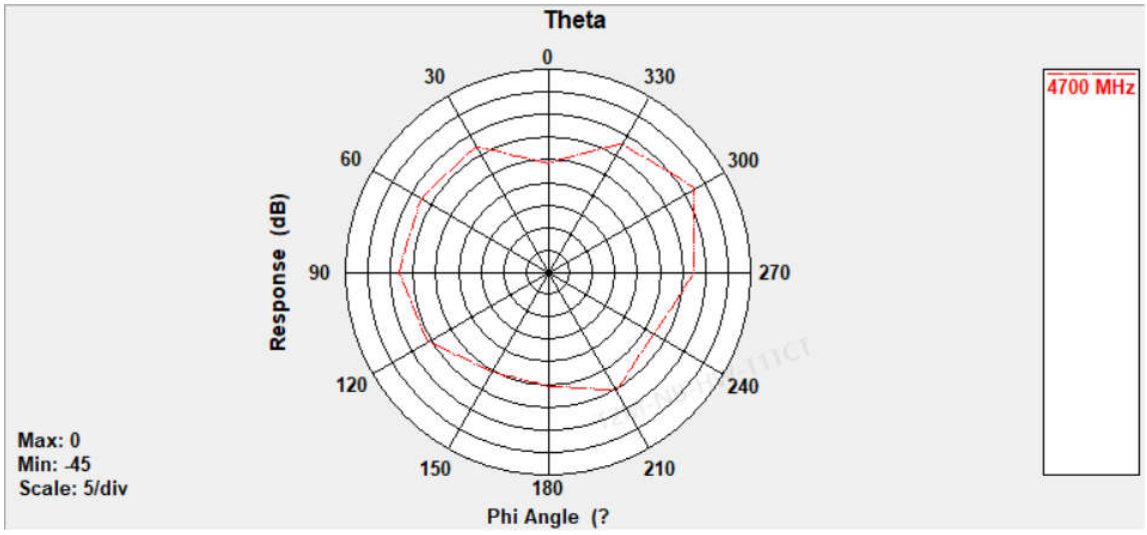
Phi0： 4700MHz



Phi90： 4700MHz

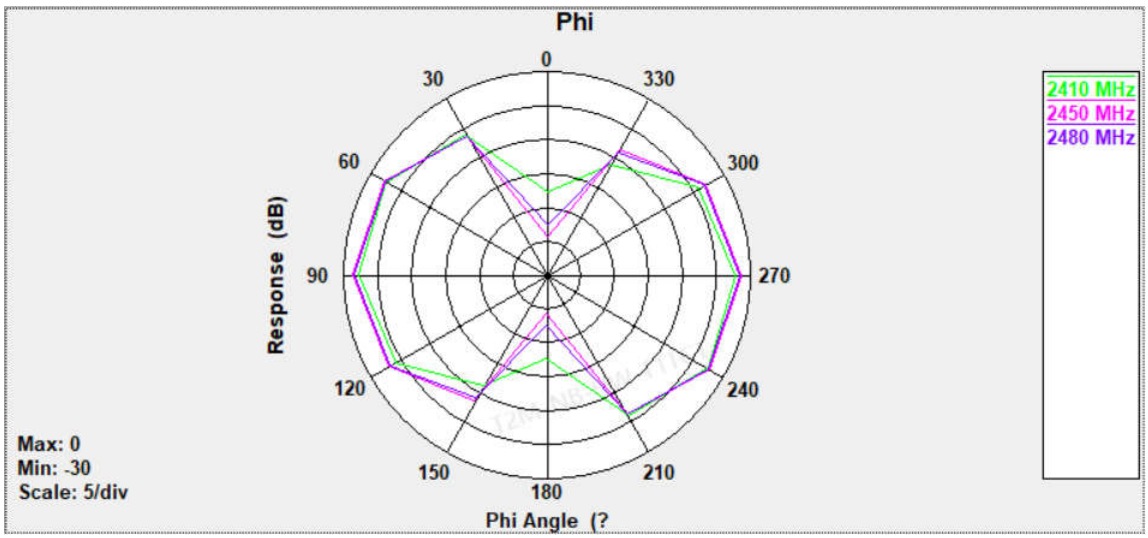


Theta90： 4700MHz

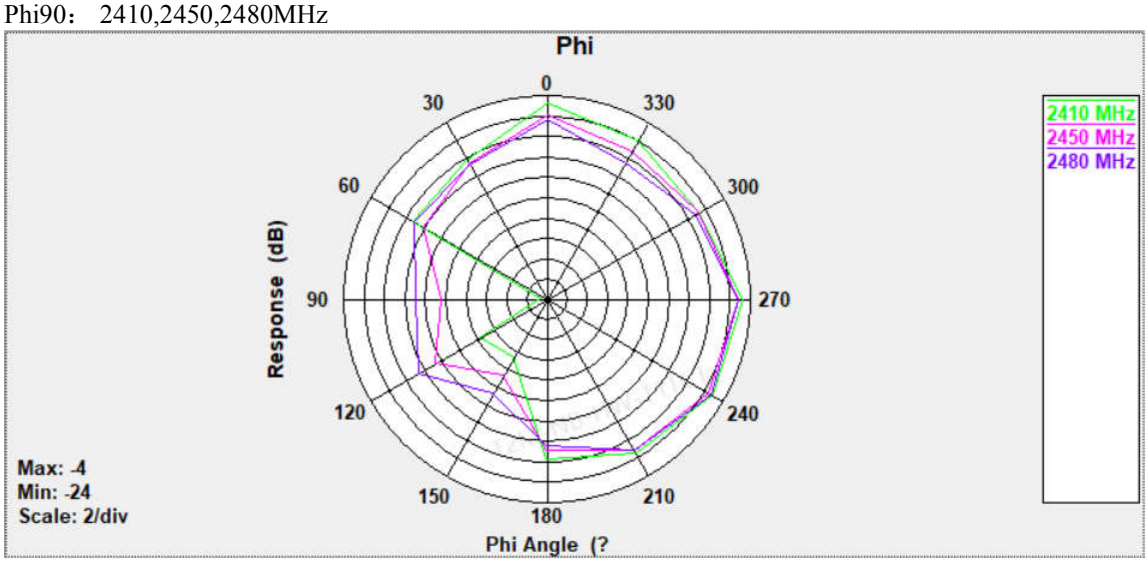


ANT6:

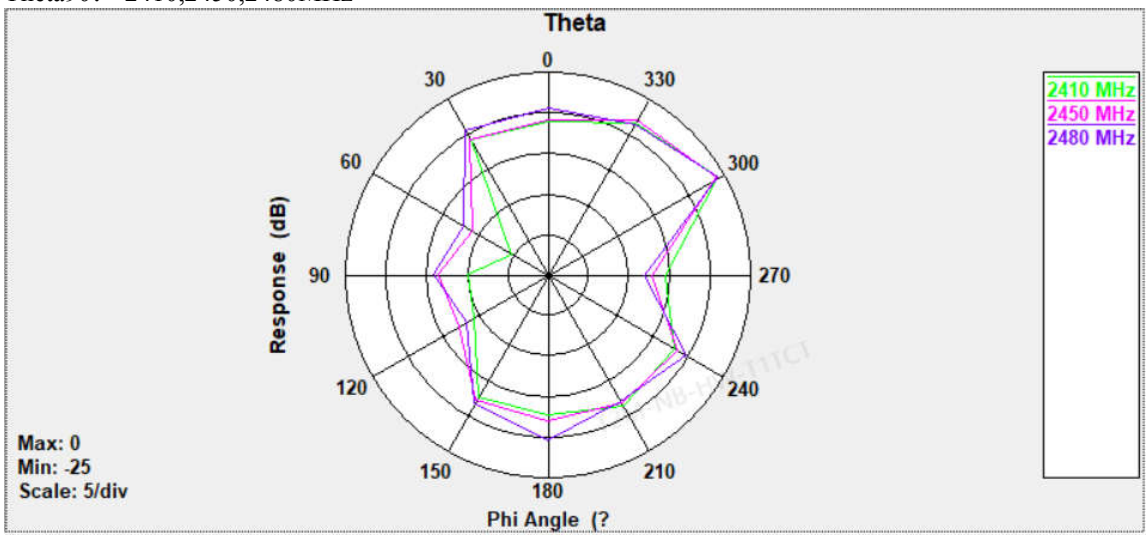
Phi0： 2410,2450,2480MHz



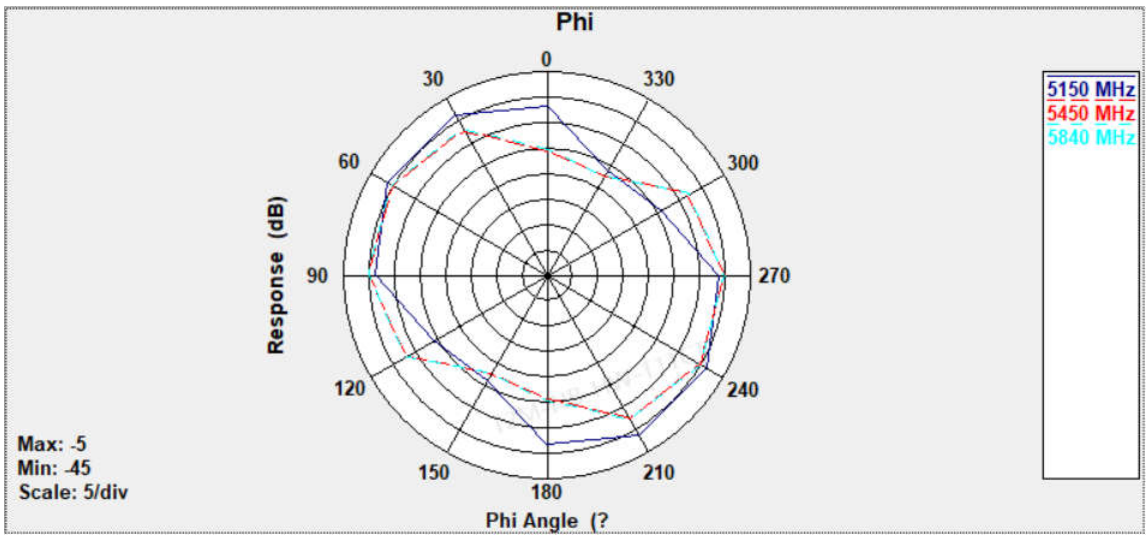
Phi90： 2410,2450,2480MHz



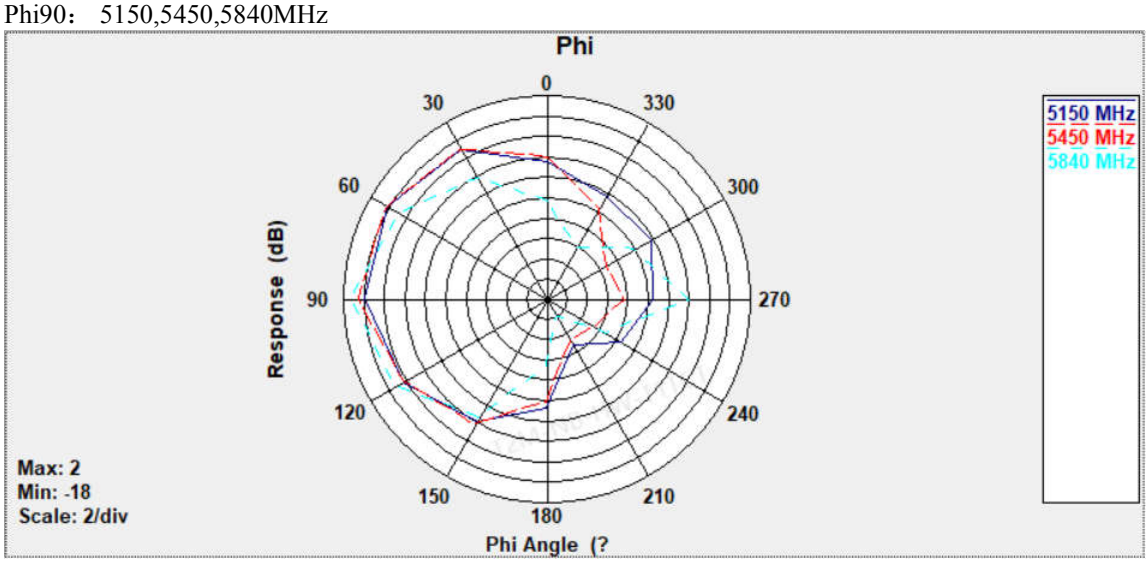
Theta90： 2410,2450,2480MHz



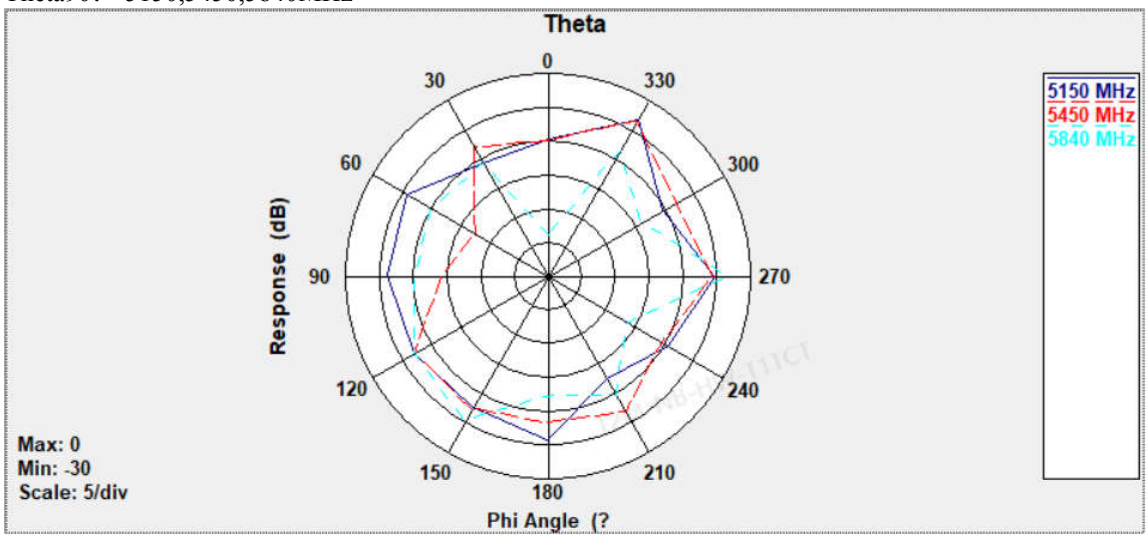
Phi0： 5150,5450,5840MHz



Phi90： 5150,5450,5840MHz

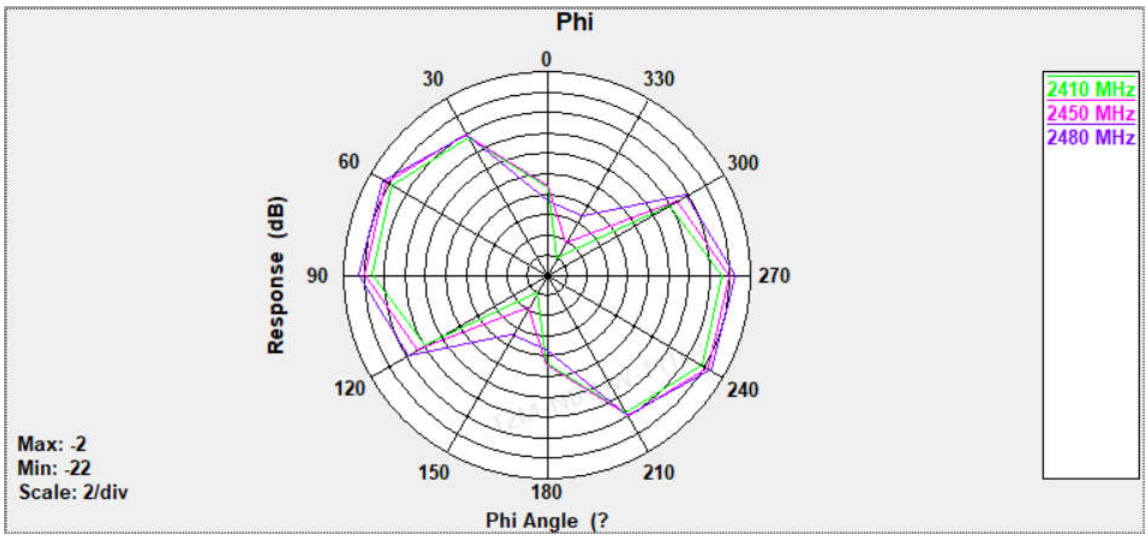


Theta90： 5150,5450,5840MHz

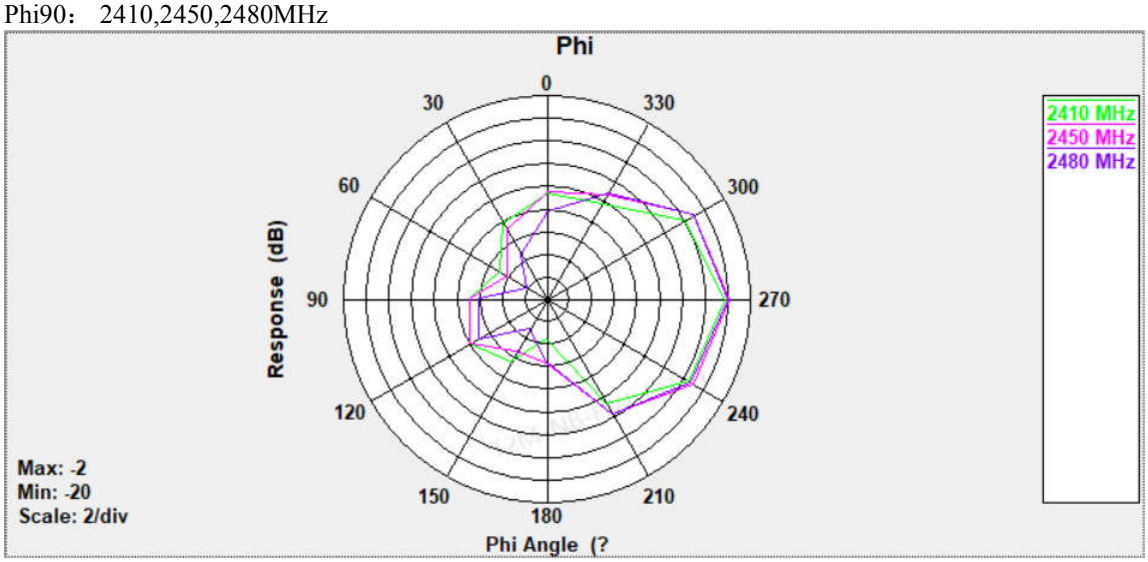


ANT7:

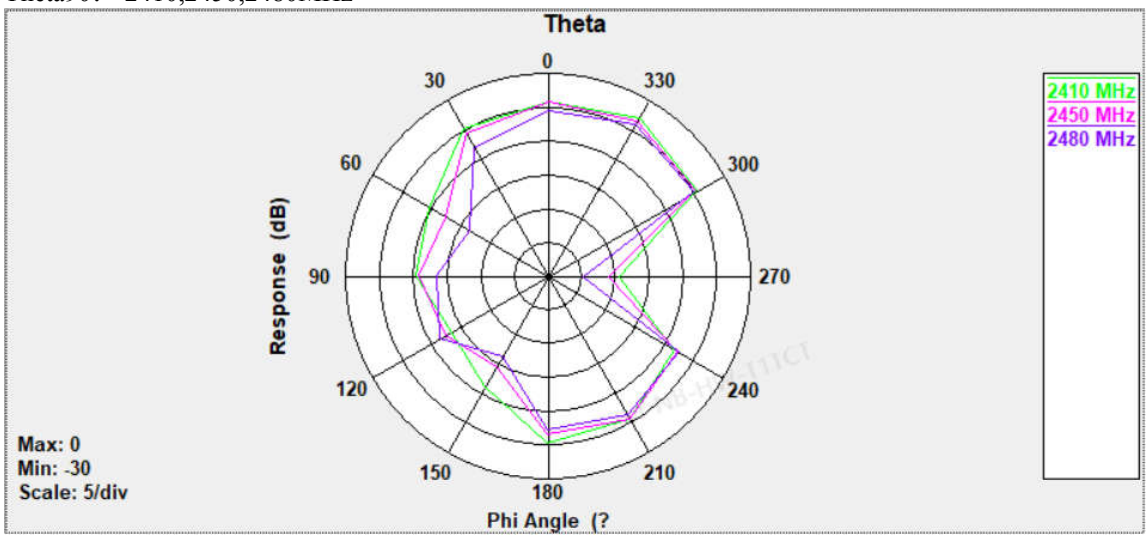
Phi0： 2410,2450,2480MHz



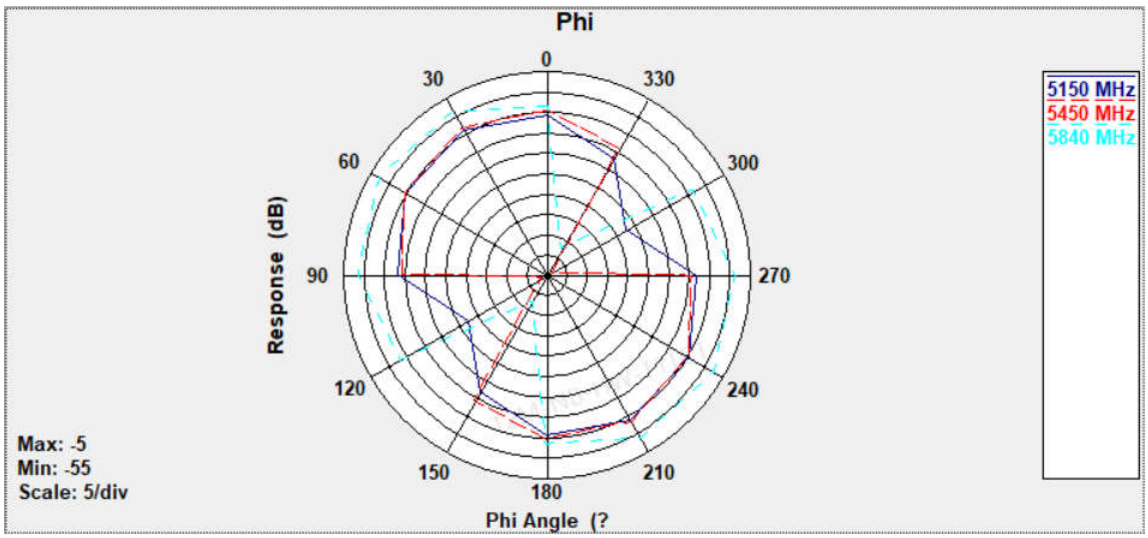
Phi90： 2410,2450,2480MHz



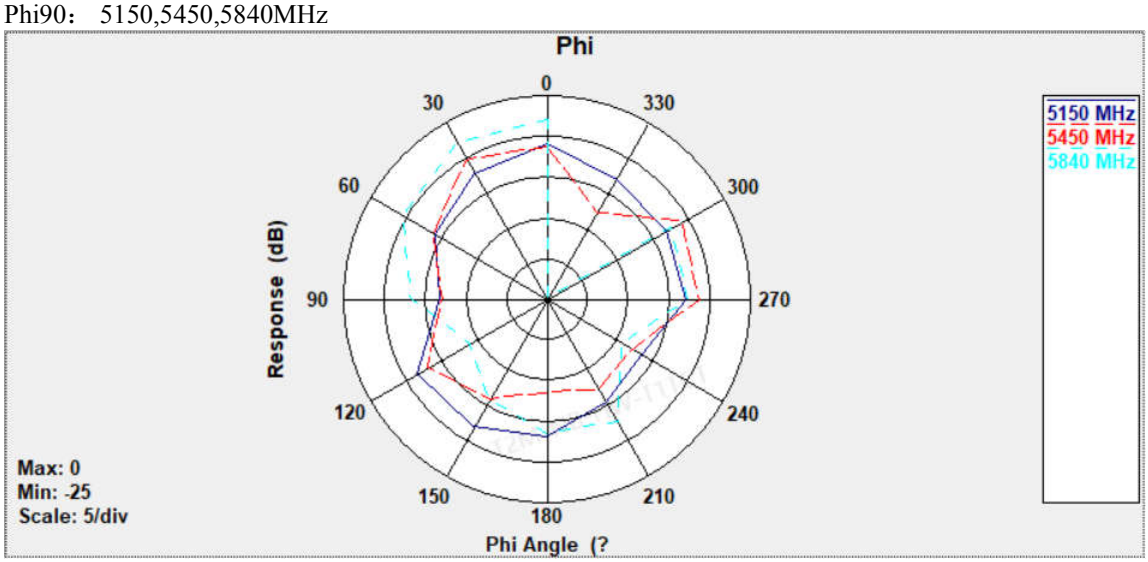
Theta90： 2410,2450,2480MHz



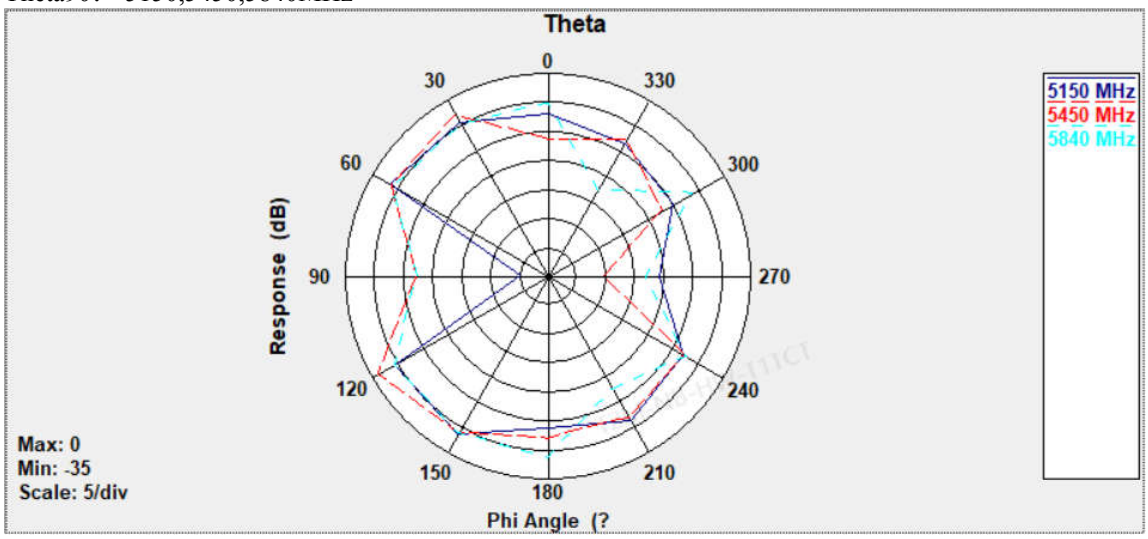
Phi0： 5150,5450,5840MHz

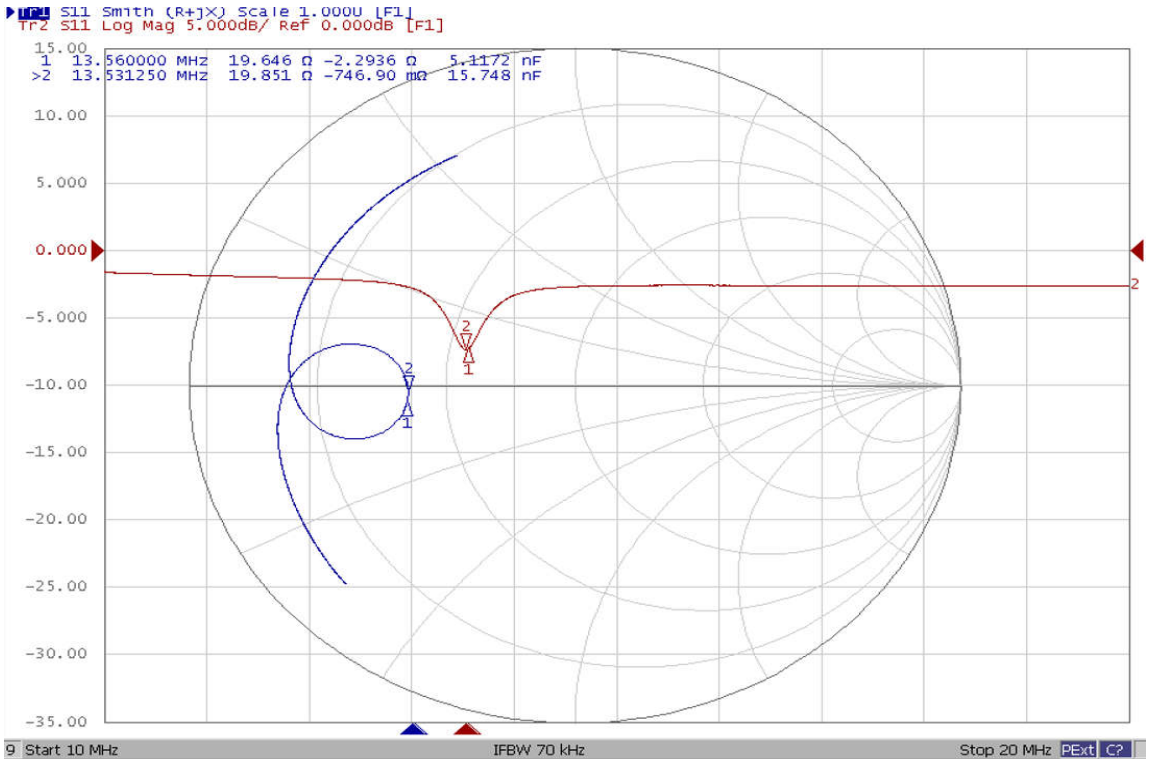


Phi90： 5150,5450,5840MHz



Theta90： 5150,5450,5840MHz



Instrument	Manufacturer	Model.NO	Calibration date	Test Date	Due Date
Base station	Anritsu	MT8820C	2022.03	2022.05	2023.03
Base station	Keysight	UXM E7515E	2022.01	2022.05	2023.01
Base station	R&S	CMW500	2022.02	2022.05	2023.02

NFC Antenna
Antenna Dimensions:
8 in Enlarged Area : 2400 mm2