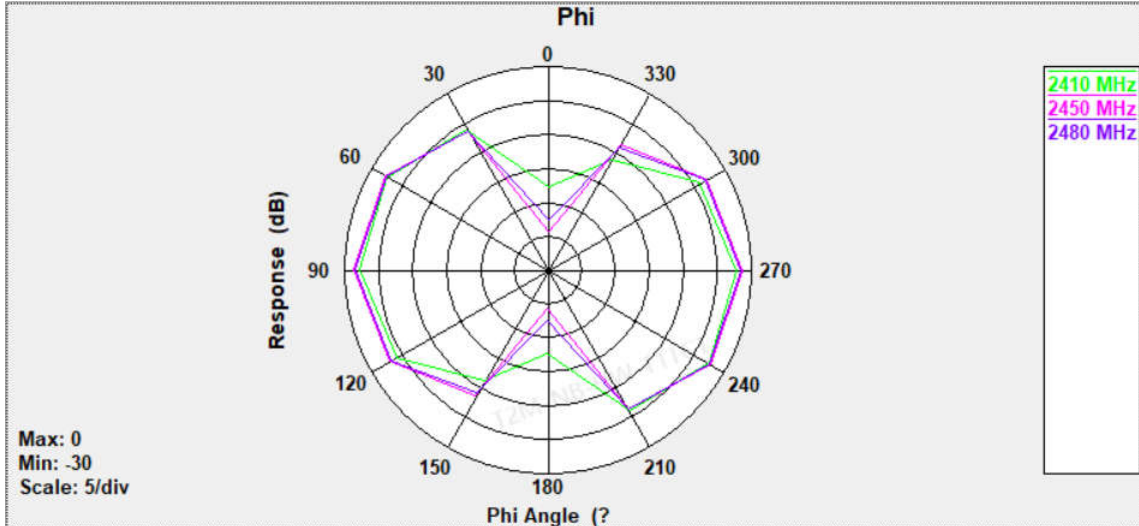


Antenna Report	
Company	Zebra Technologies Corporation
Model Name	Goose8 WWAN ROW ET45CA
Type	WLAN5GHz/2.4GHz /Bluetooth Antenna type : IFA
Support Feature ①	WLAN: BT5.1+BLE; 2.4GHz 802.11b/g/n/ac/ax HT20 5GHz 802.11a/n/ac/ax HT20/40/80
Peak Gain ②	BT: 2402~2480MHz: 1.39 dBi WLAN: ANT6: 2400~2483.5MHz: 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

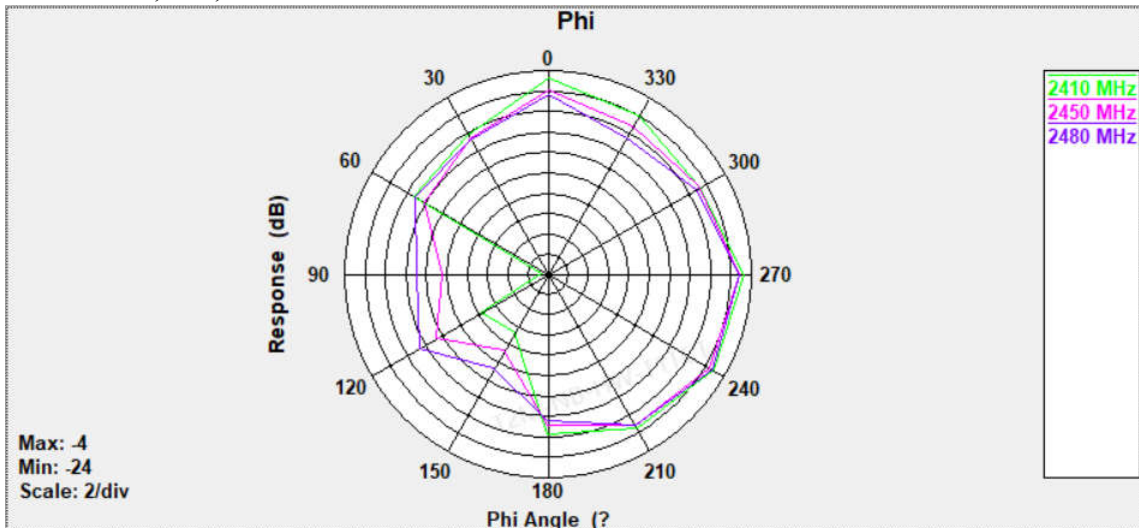
Test Site: GTS

ANT6:

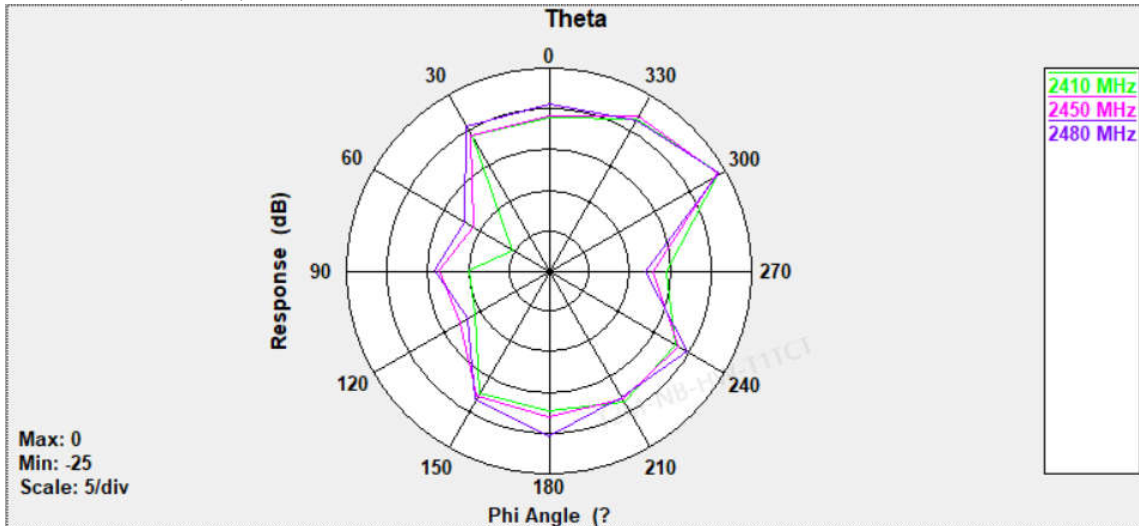
Phi0: 2410,2450,2480MHz



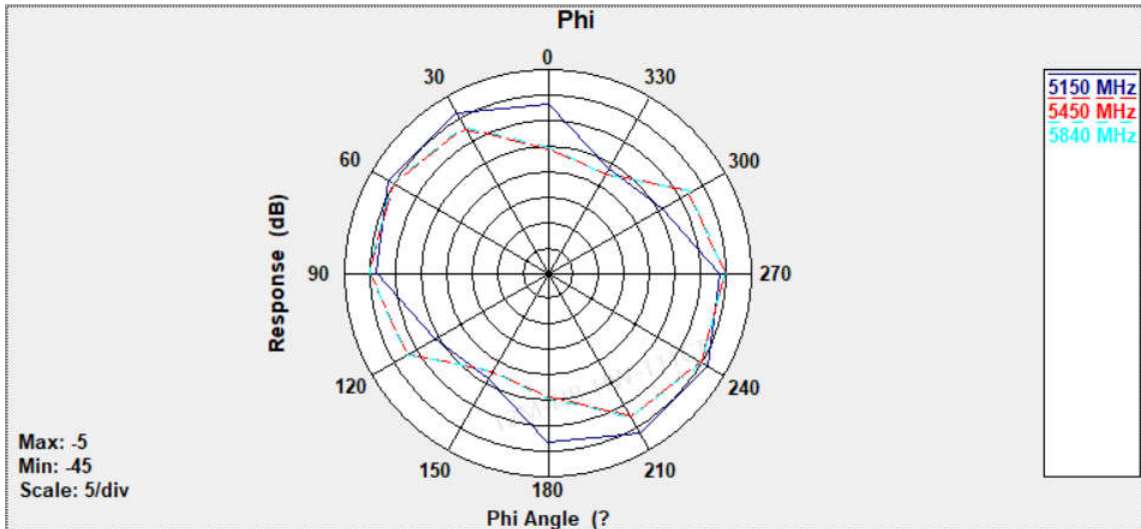
Phi90: 2410,2450,2480MHz



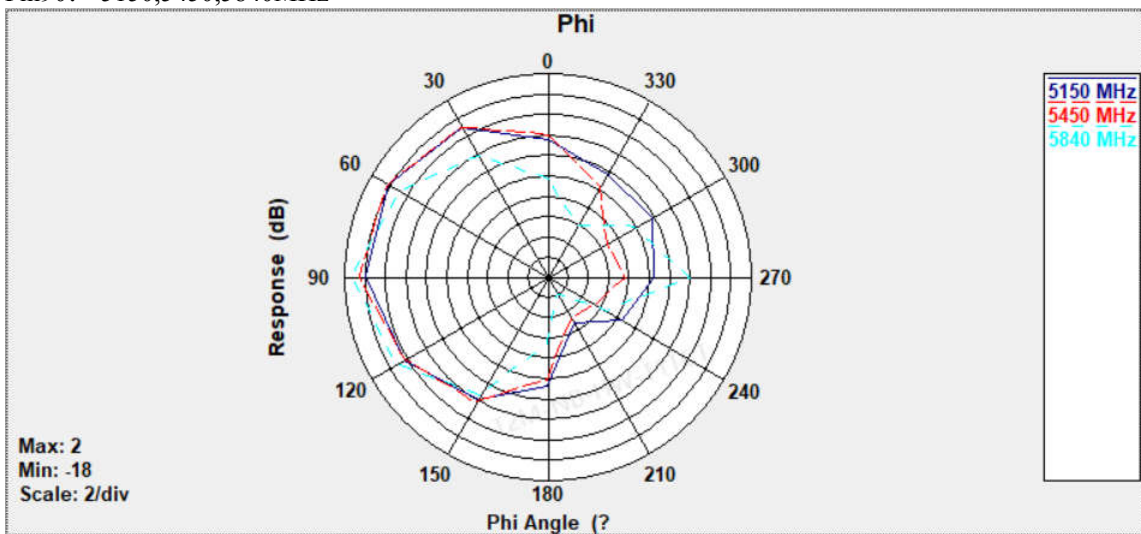
Theta90: 2410,2450,2480MHz



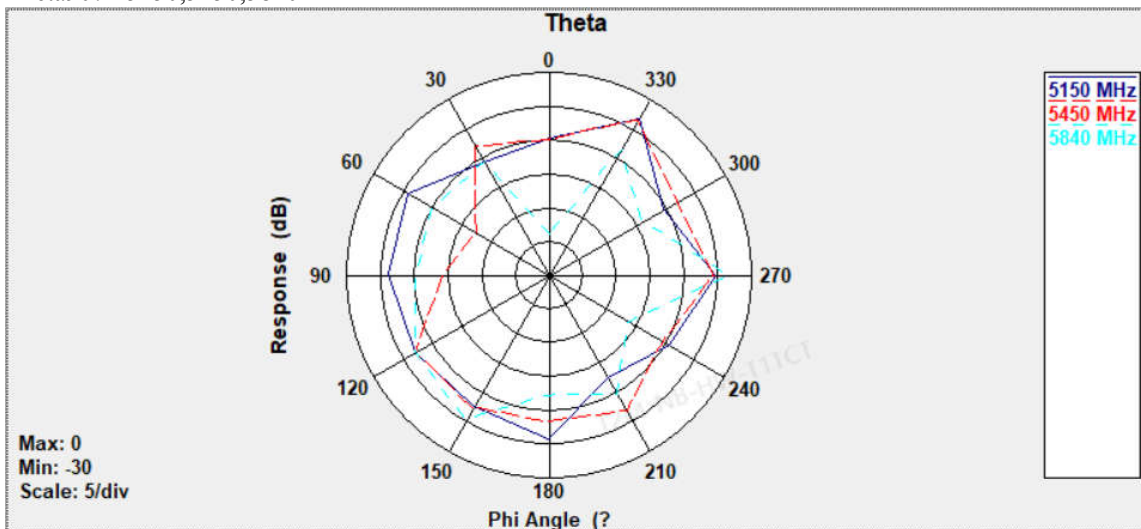
Phi0: 5150,5450,5840MHz



Phi90: 5150,5450,5840MHz

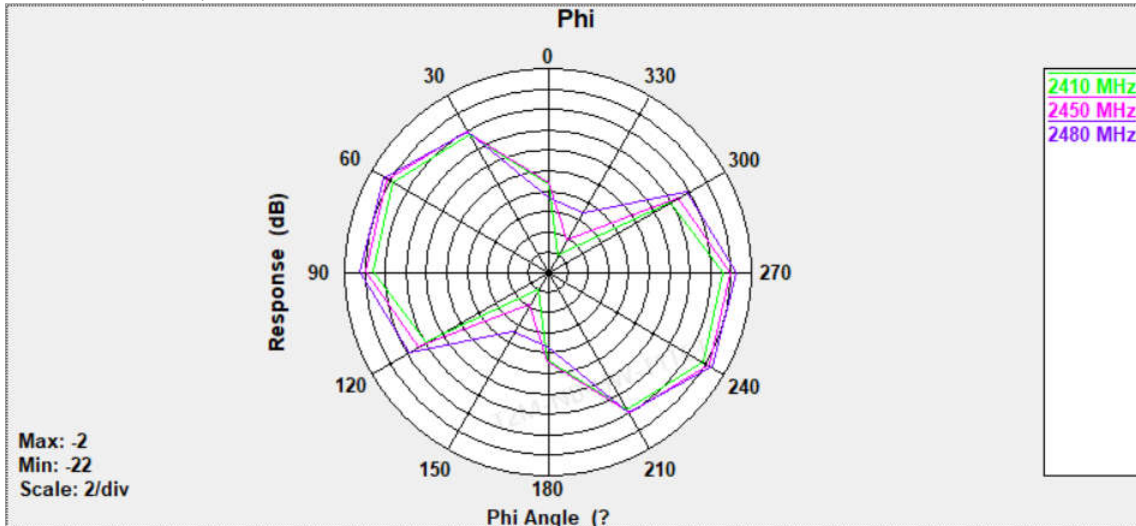


Theta90: 5150,5450,5840MHz

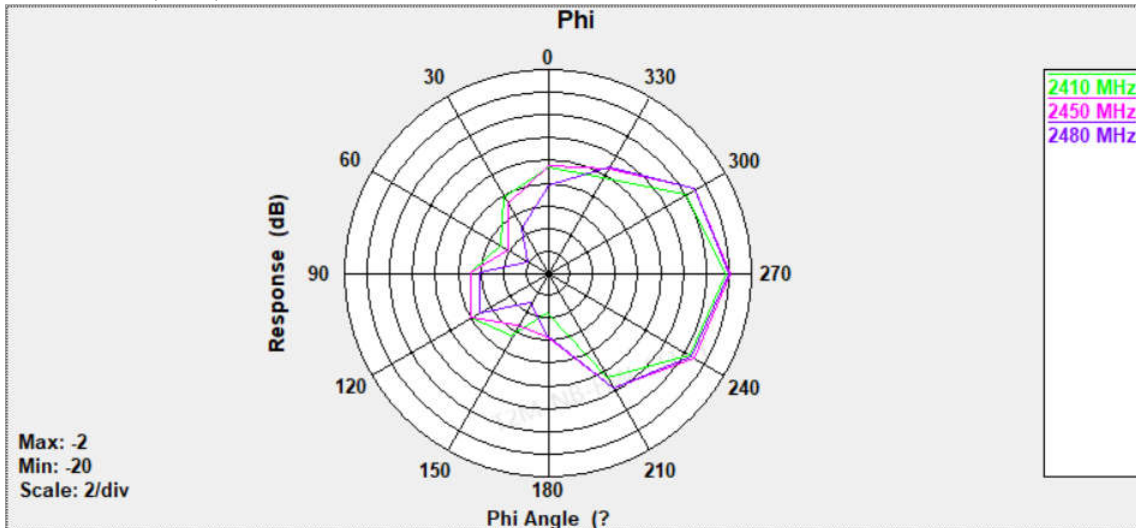


ANT7:

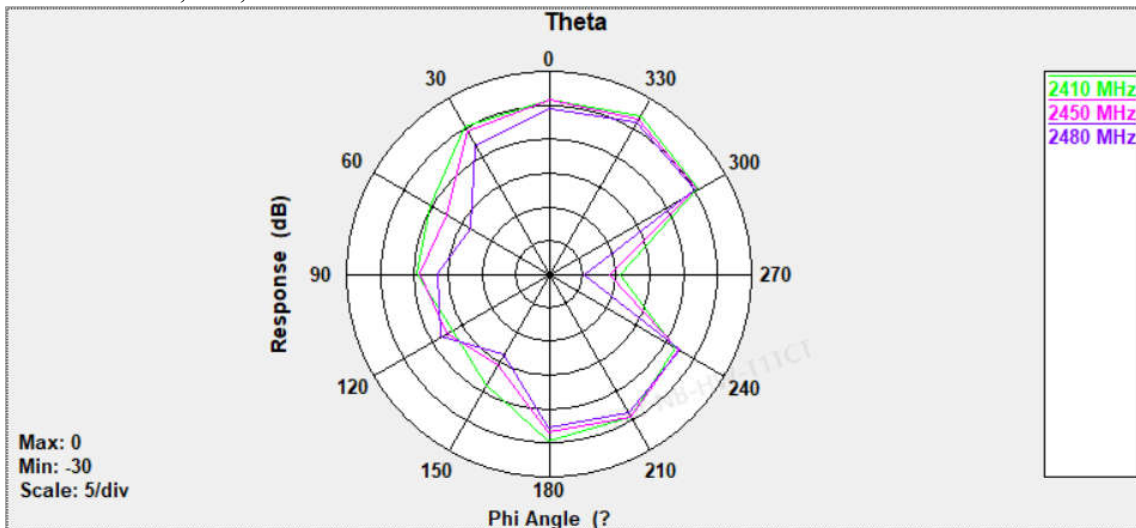
Phi0: 2410,2450,2480MHz



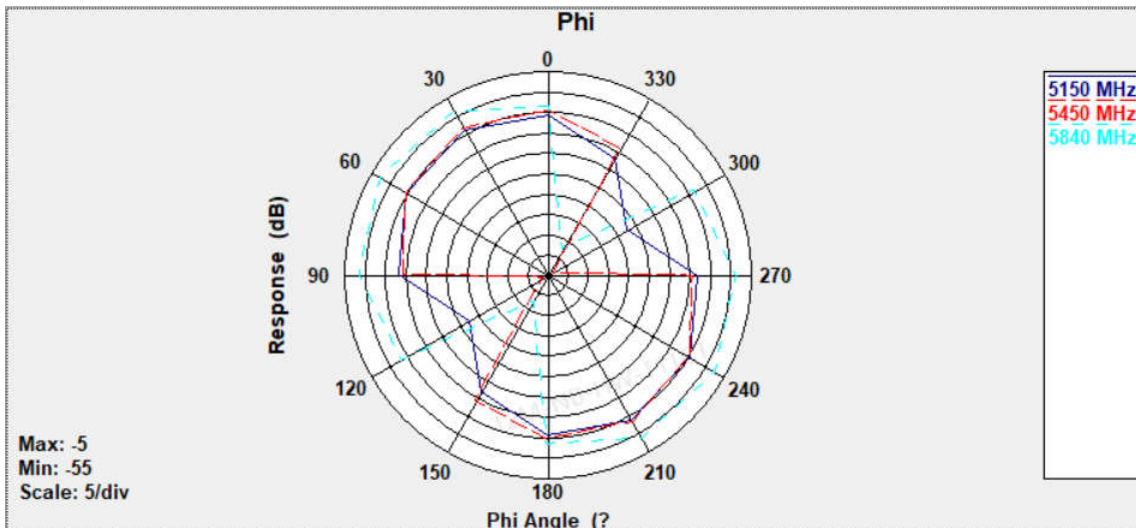
Phi90: 2410,2450,2480MHz



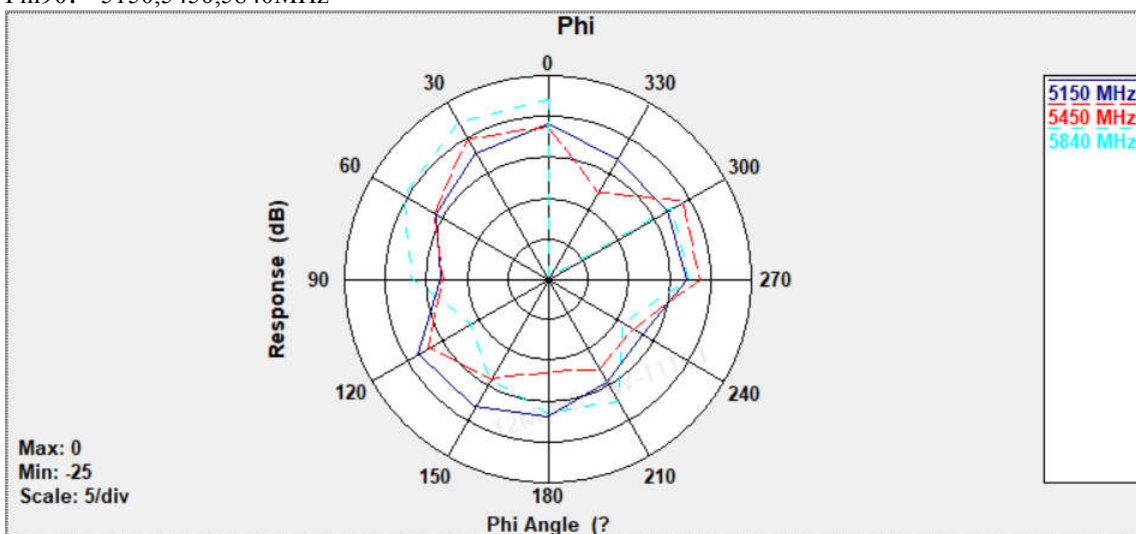
Theta90: 2410,2450,2480MHz



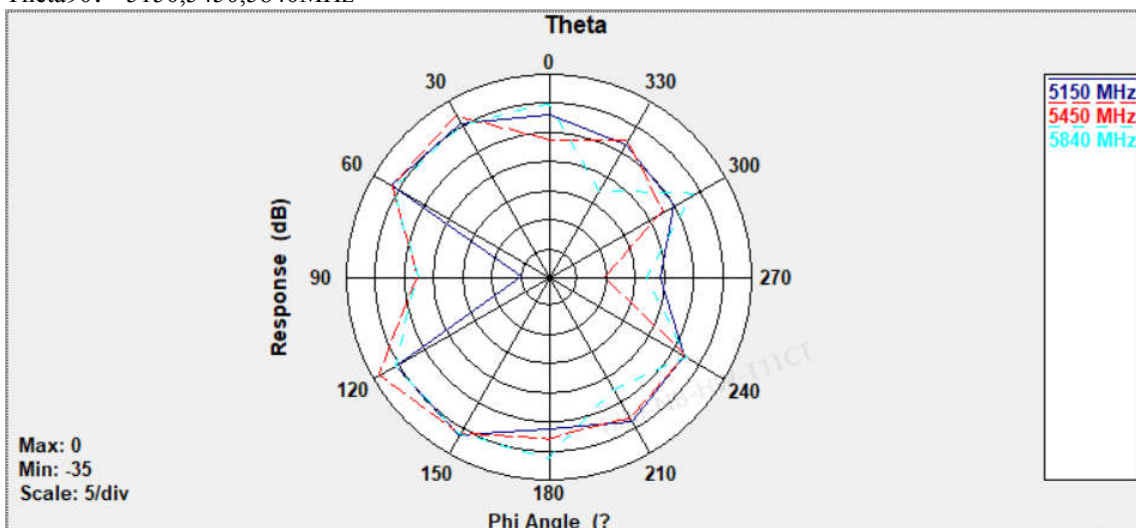
Phi0: 5150,5450,5840MHz



Phi90: 5150,5450,5840MHz



Theta90: 5150,5450,5840MHz



Antenna Report

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

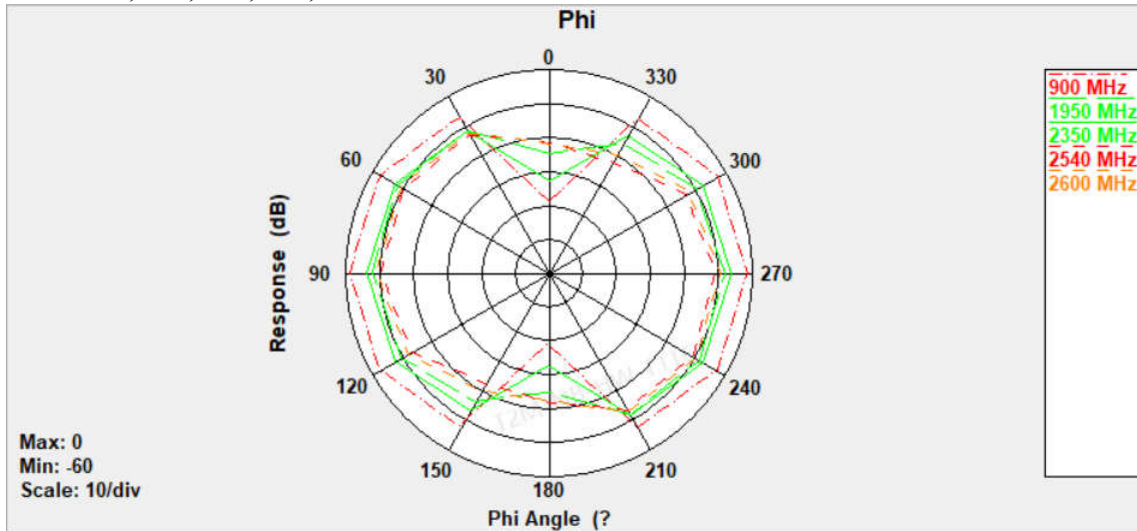
Support Feature ①	WWAN ROW:Antenna	Mode	Tx Band	Rx Band
	ANT0 TRX1-LMH	Main LB/MB/HB	GSM:GSM850/900/1800/1900 3G:UMTS LB:B5/8/17/19/20/28 MB: B1/2/3/4/39/66 HB: B7/38/40/, N7/38/40	GSM:GSM850/900/1800/1900 3G: UMTS LB: B5/8/17/19/20/28 MB: B1/2/3/4/39/66 HB: B7/38/40/41 N7/38/40
	ANT1 DRX-LHU	LB/HB/UHB	B41, N41/77/78	LB: B5/8/17/19/20/28 HB: B7/38/40/41 UHB:B42/43 N77/78/79
	ANT2 TRX0_LMH	LB/MB/HB	LB: B5/20 MB: B1/2/3/4 HB: B40/41, N7/38/40/41	LB: B5/20 MB: B1/2/3 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 HB: B40 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 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						

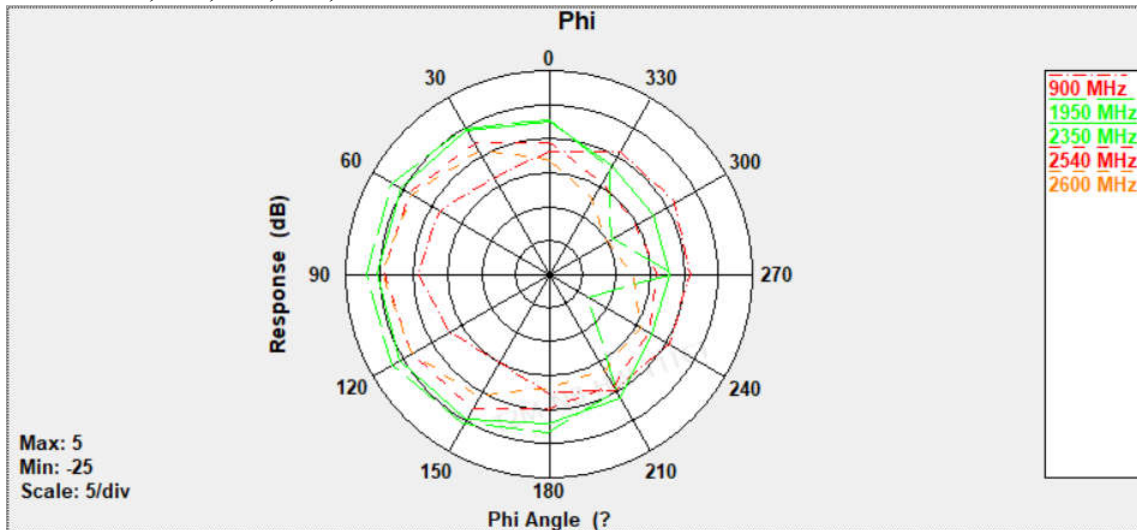
Test Site: SATIMO

ANT0:

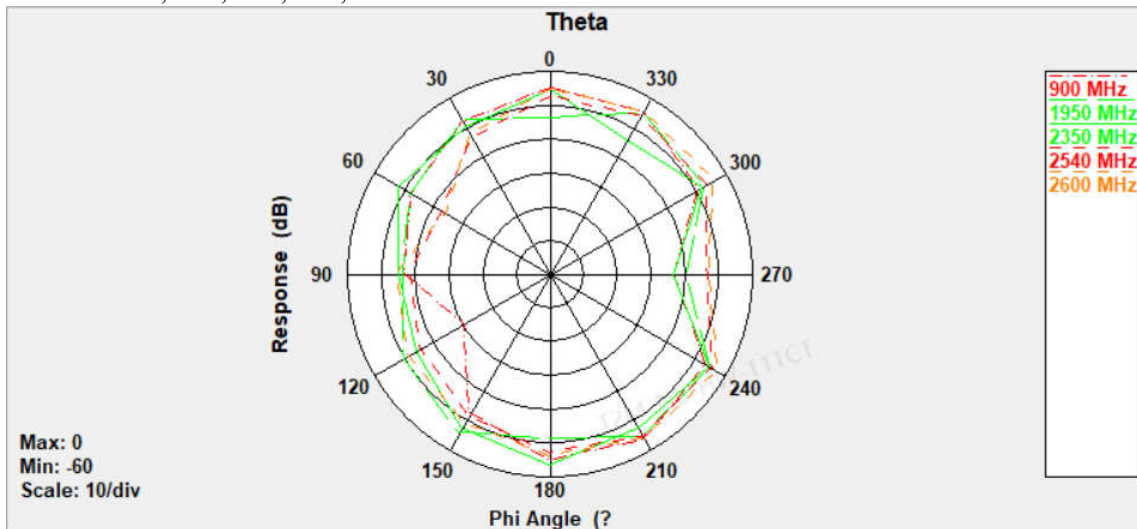
Phi0: 900,1950,2350,2540,2600MHz



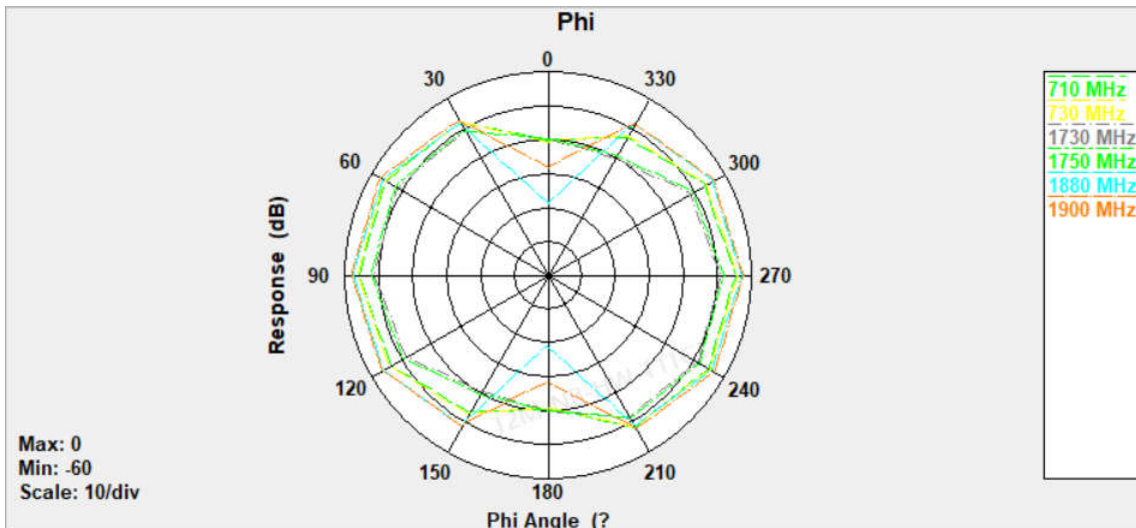
Phi90: 900,1950,2350,2540,2600MHz



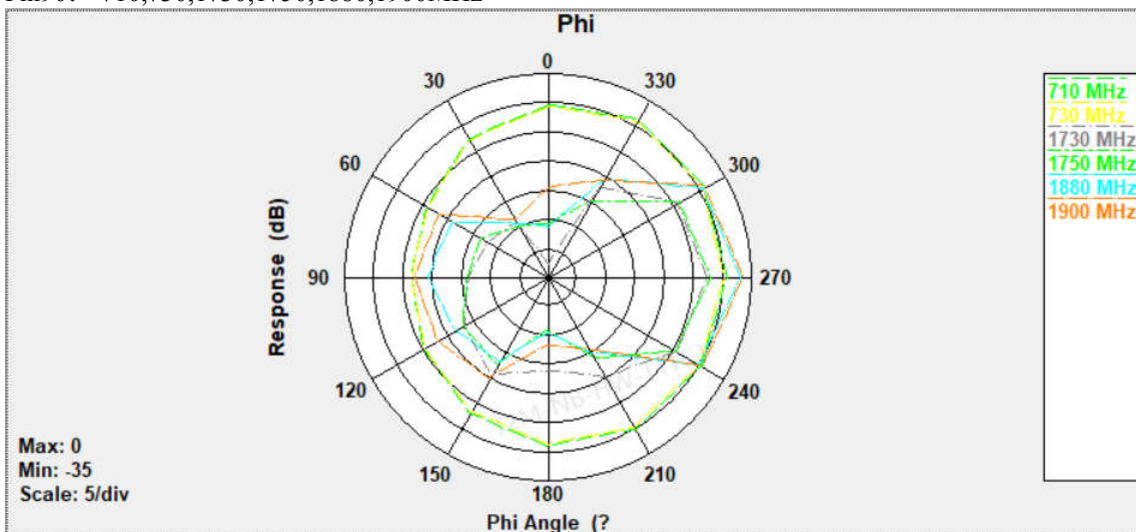
Theta90: 900,1950,2350,2540,2600MHz



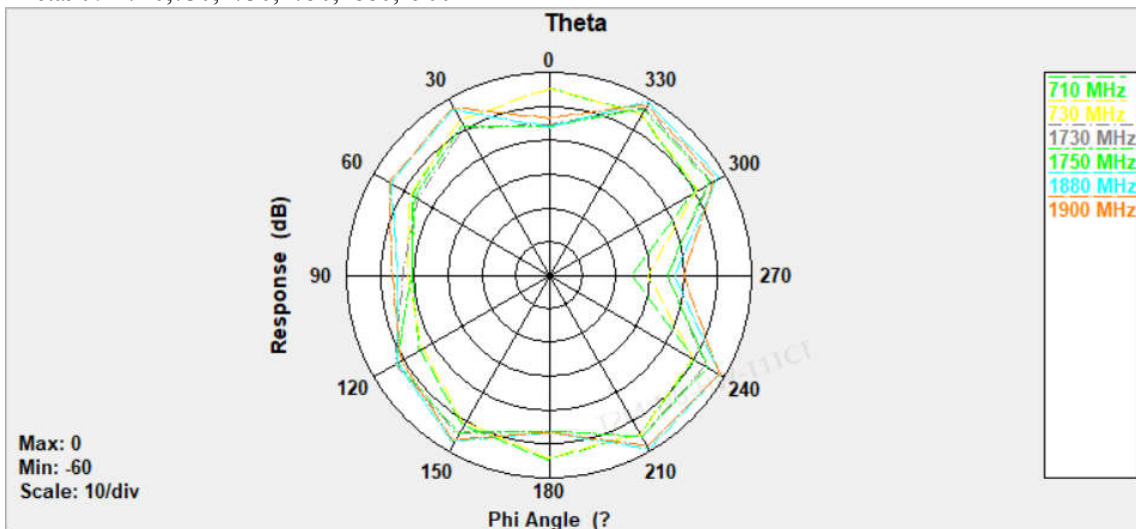
Phi0: 710,730,1730,1750,1880,1900MHz



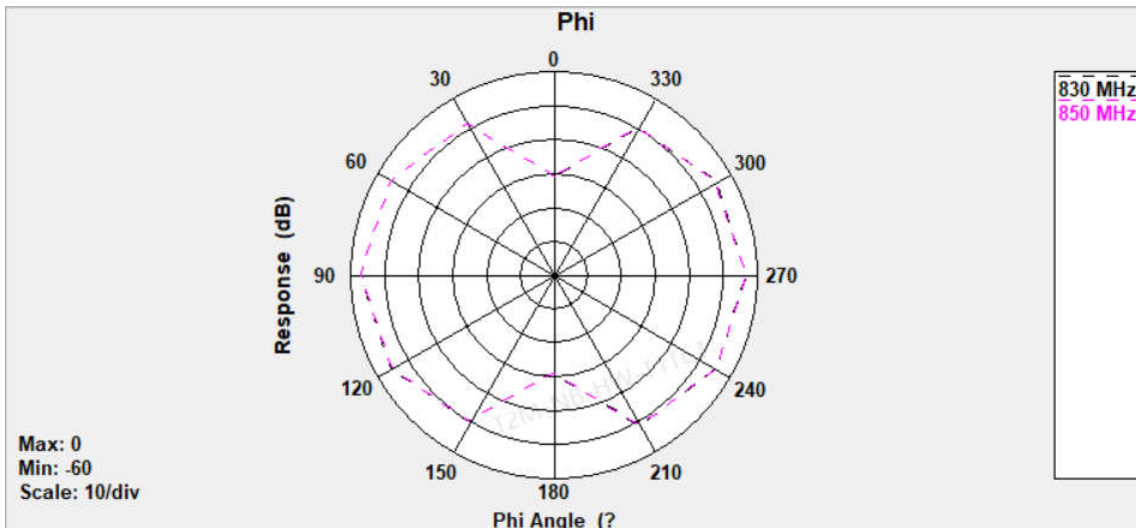
Phi90: 710,730,1730,1750,1880,1900MHz



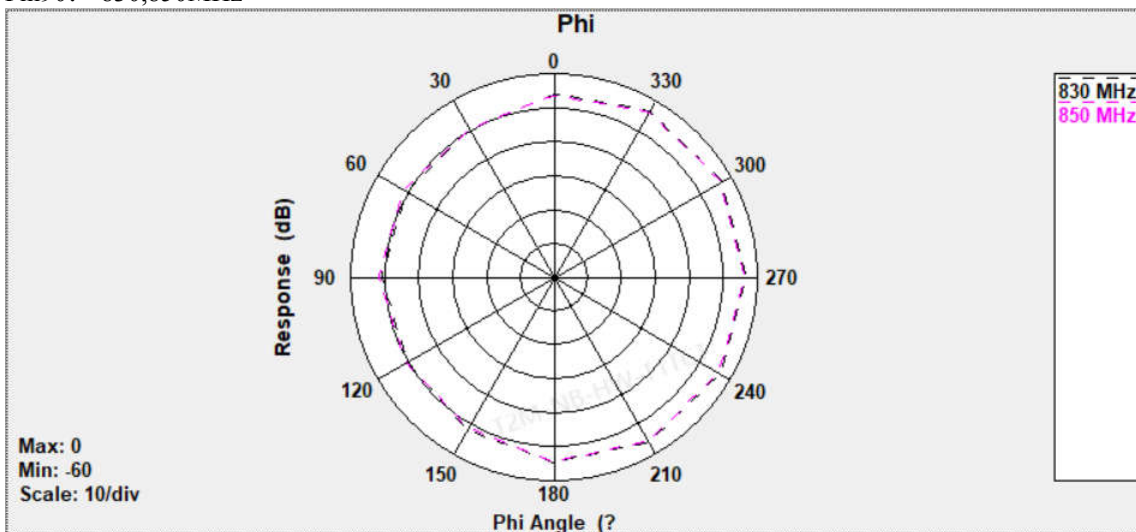
Theta90: 710,730,1730,1750,1880,1900MHz



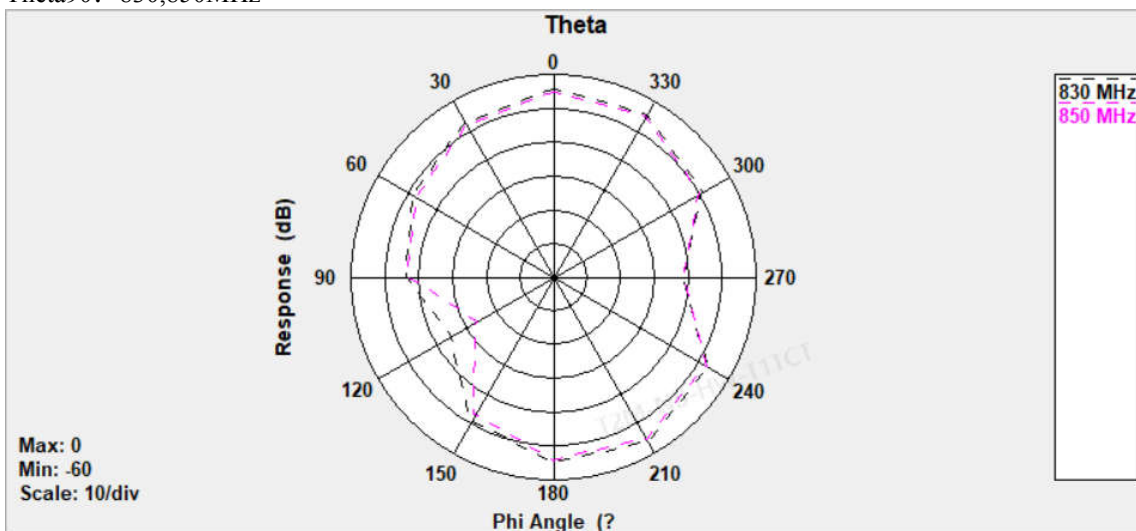
Phi0: 830,850MHz



Phi90: 830,850MHz

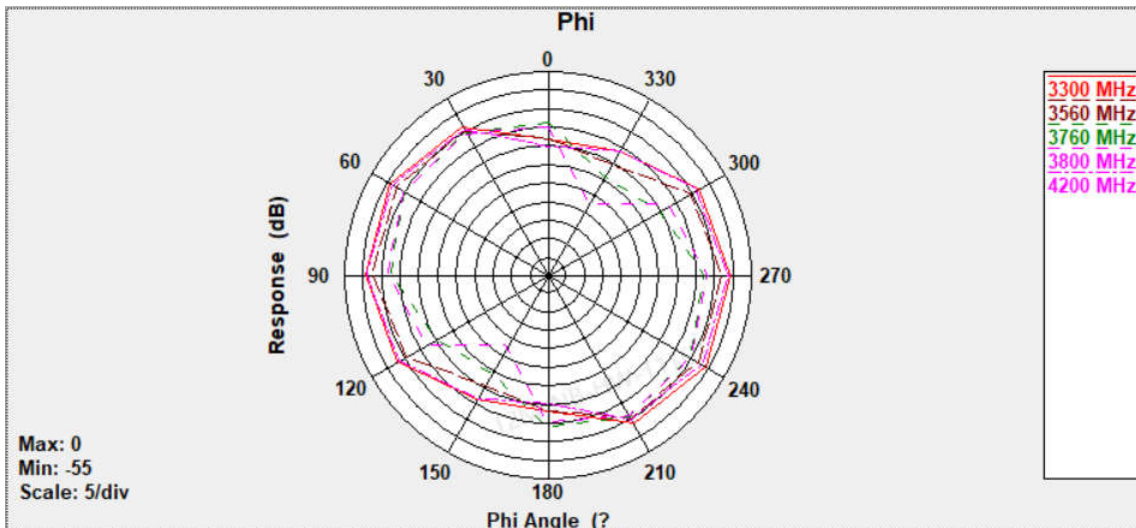


Theta90: 830,850MHz

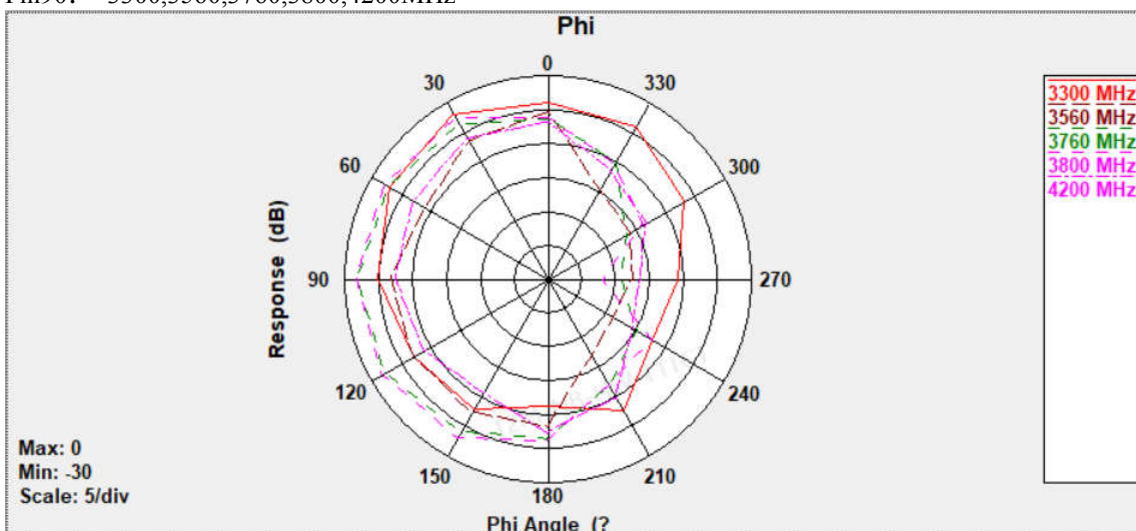


ANT1:

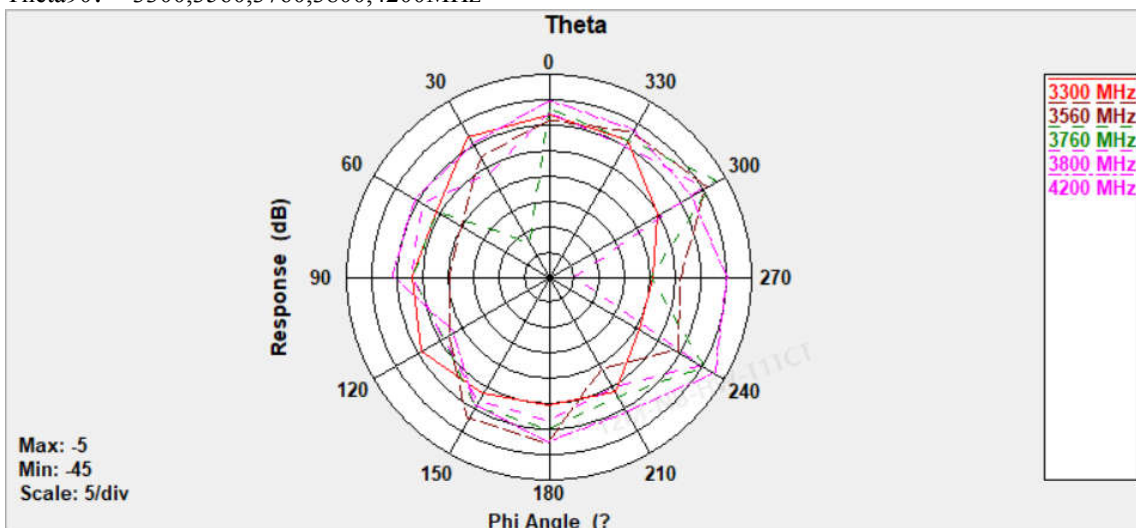
Phi0: 3300,3560,3760,3800,4200MHz



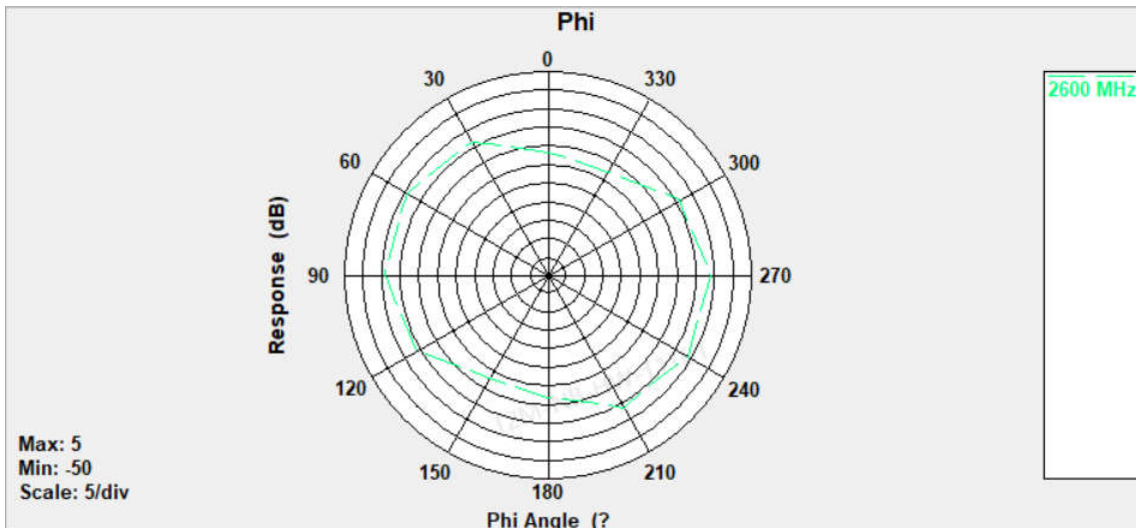
Phi90: 3300,3560,3760,3800,4200MHz



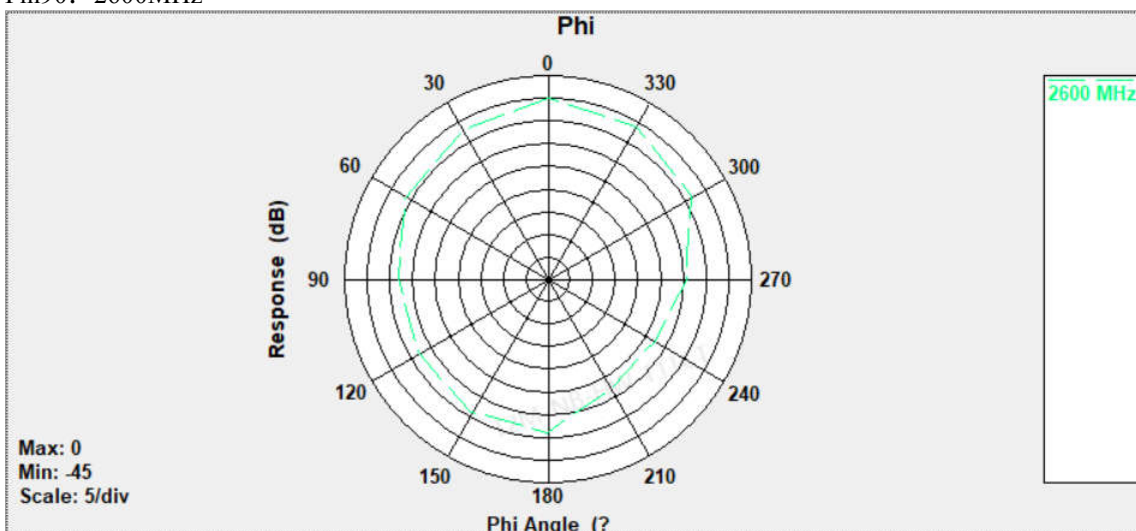
Theta90: 3300,3560,3760,3800,4200MHz



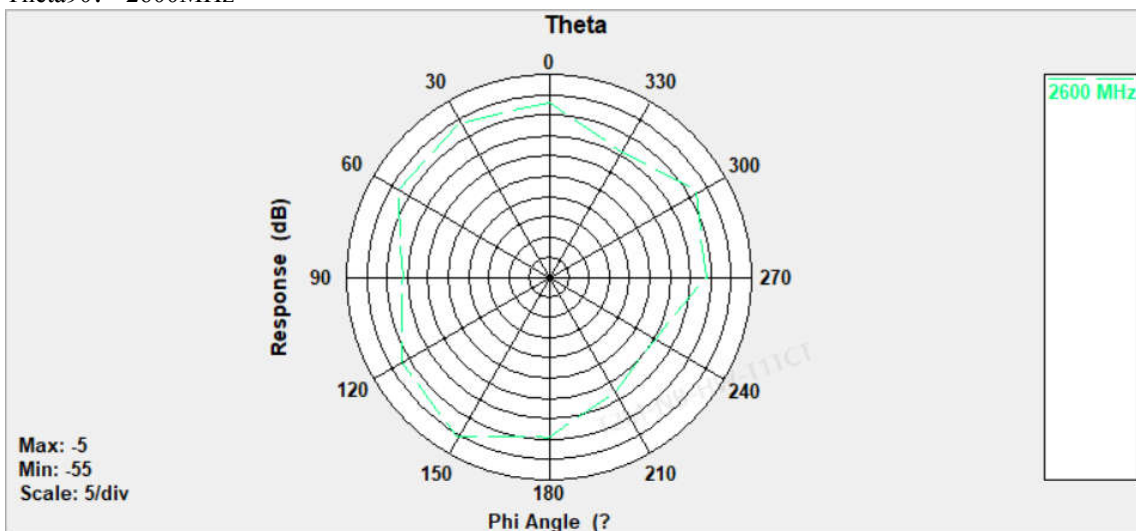
Phi0: 2600MHz



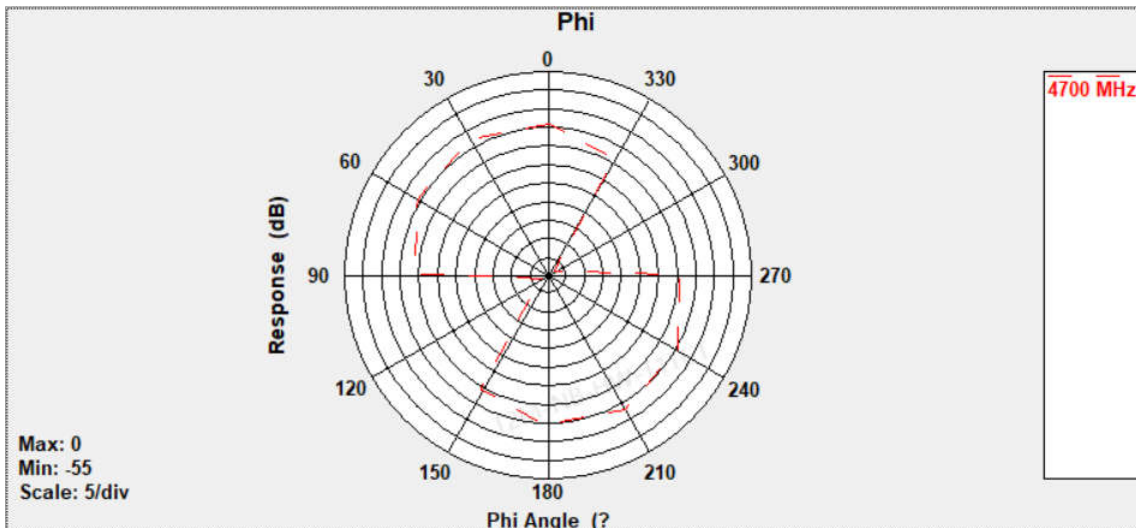
Phi90: 2600MHz



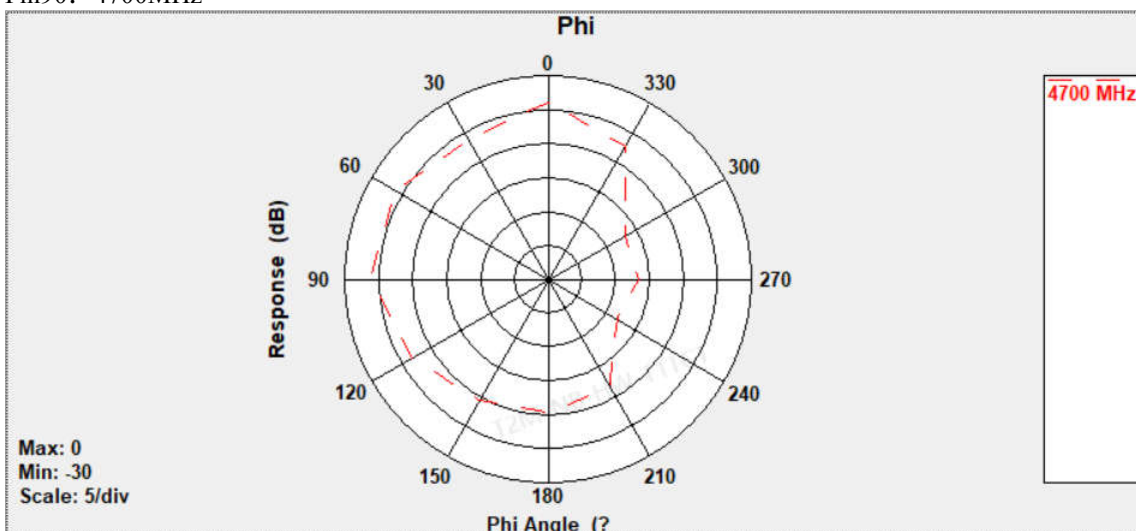
Theta90: 2600MHz



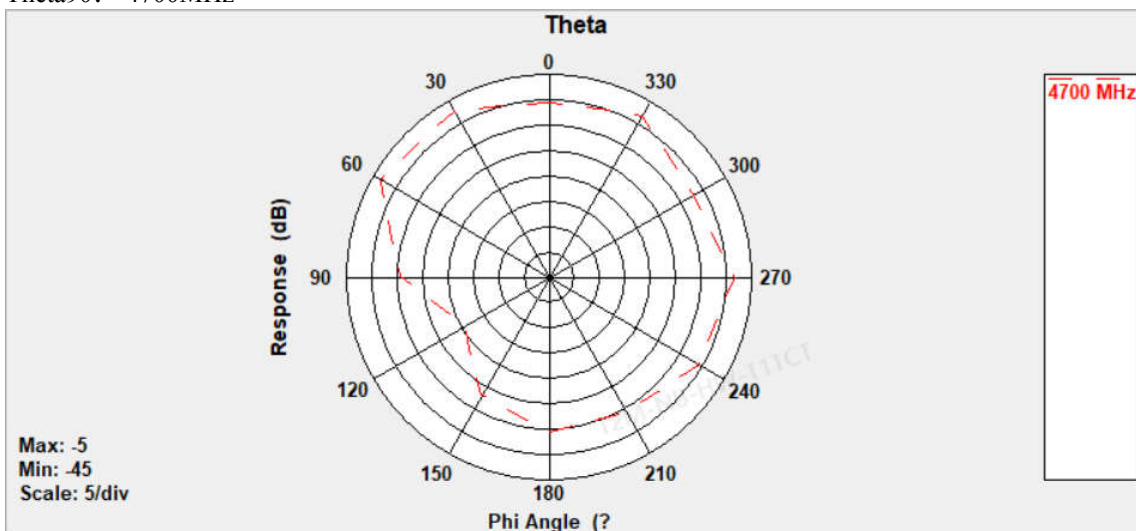
Phi0: 4700MHz



Phi90: 4700MHz

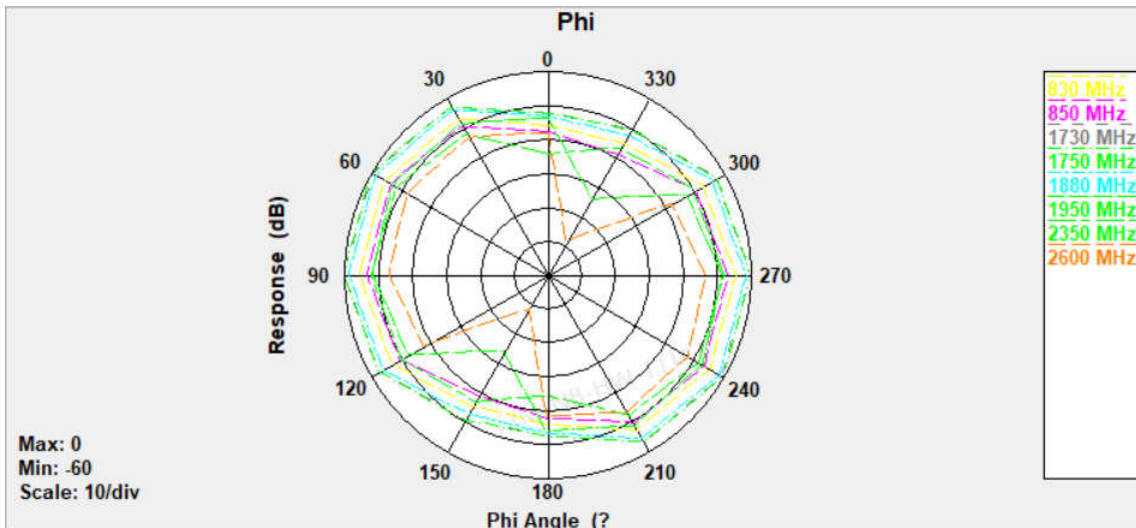


Theta90: 4700MHz

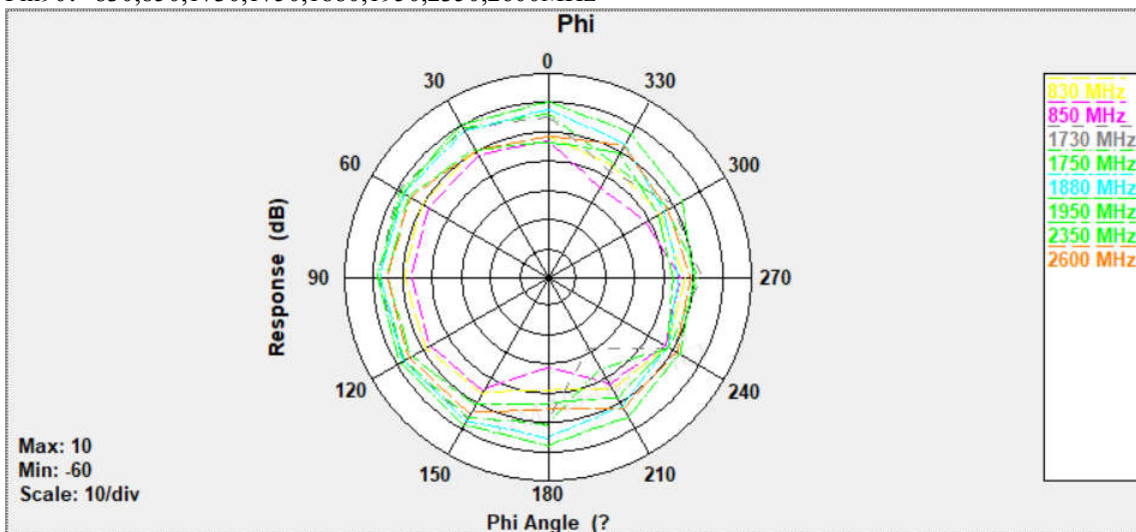


ANT2:

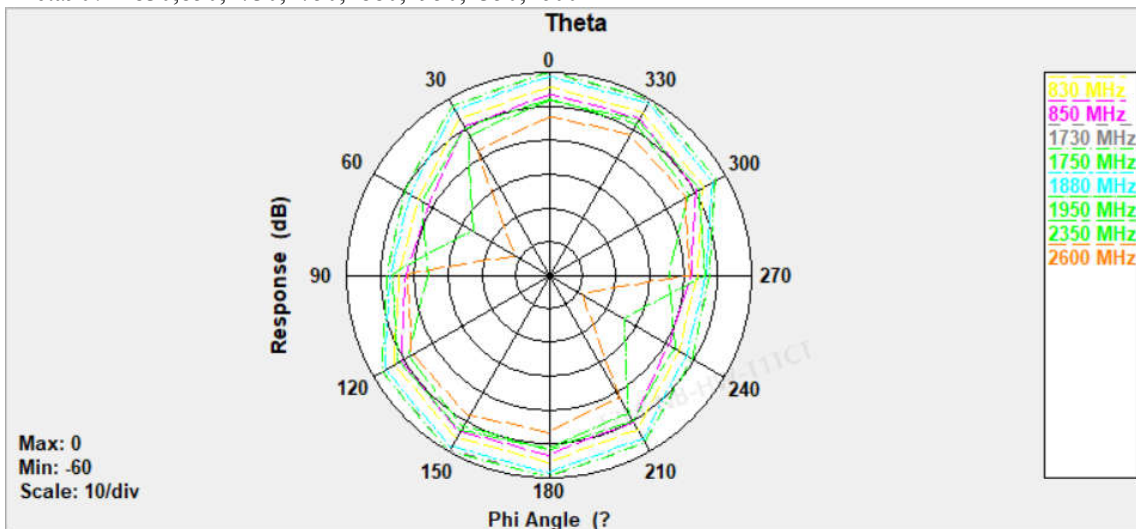
Phi0: 830,850,1730,1750,1880,1950,2350,2600MHz



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

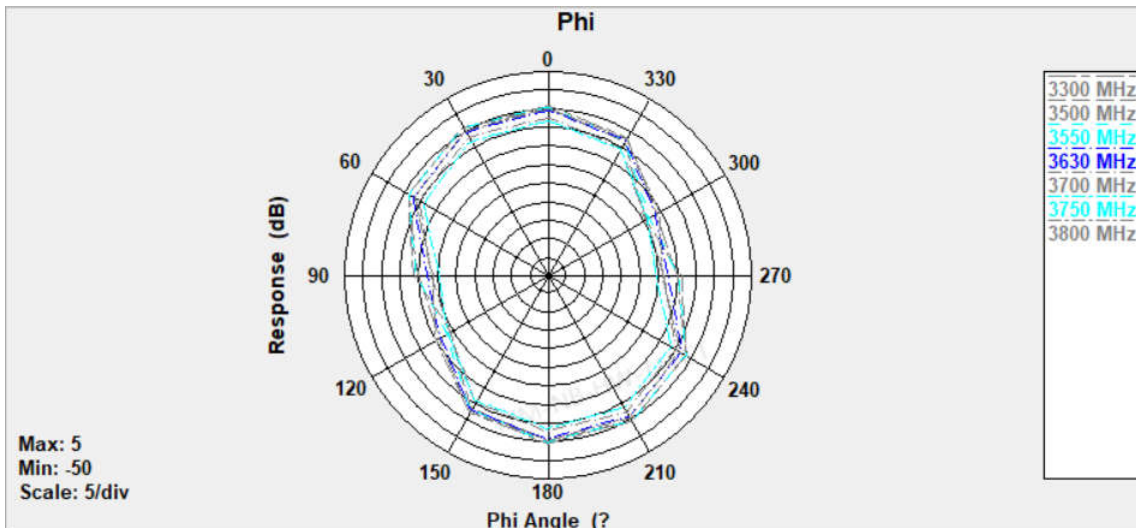


Theta90: 830,850,1730,1750,1880,1950,2350,2600MHz

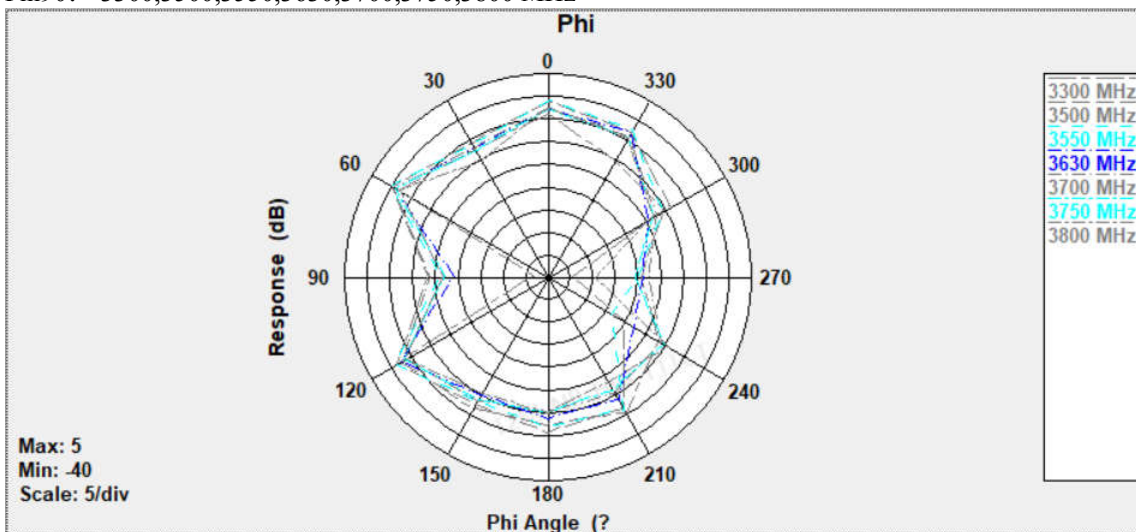


ANT3:

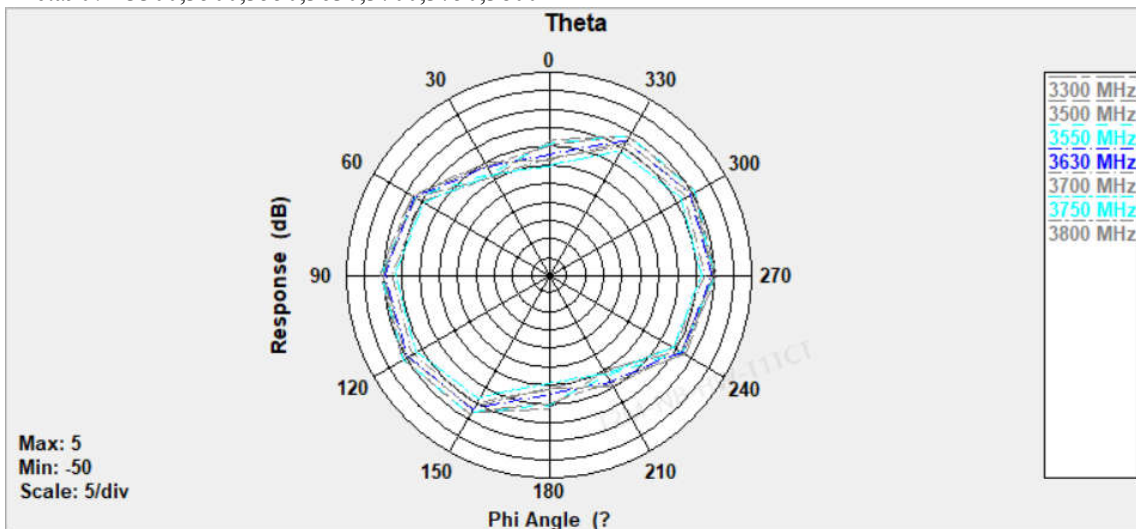
Phi0: 3300,3500,3550,3630,3700,3750,3800 MHz



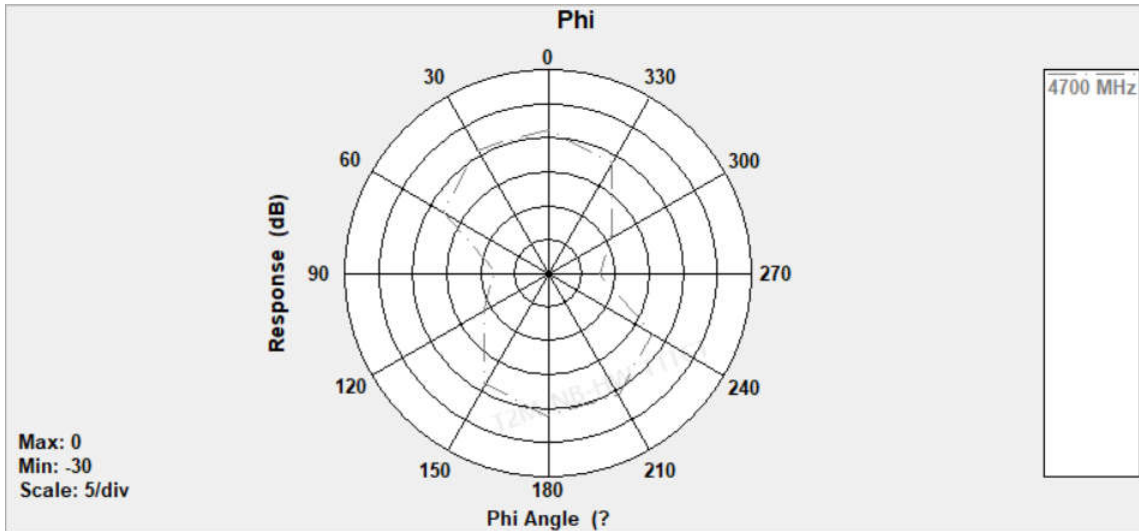
Phi90: 3300,3500,3550,3630,3700,3750,3800 MHz



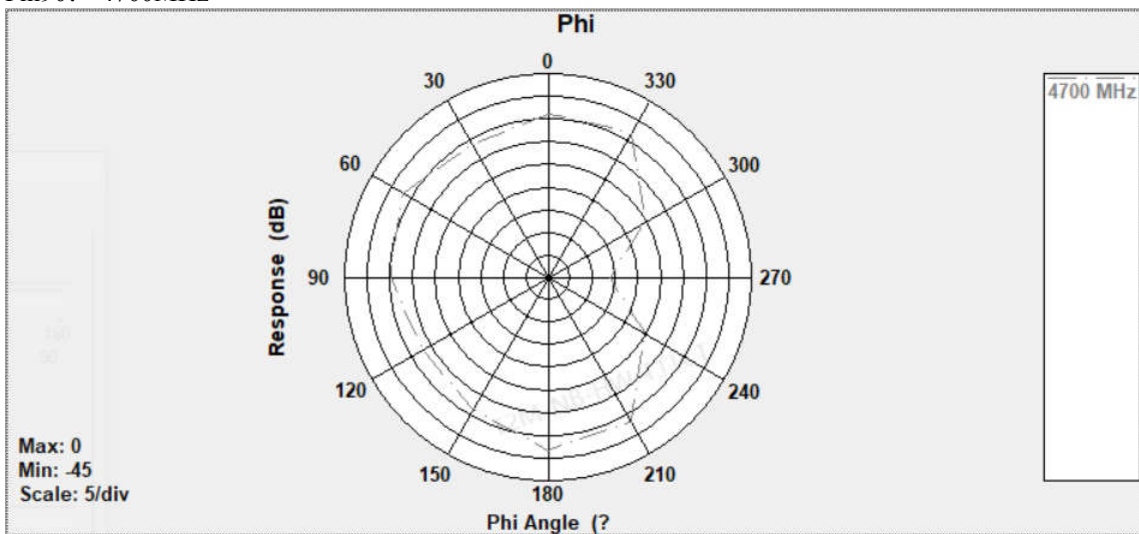
Theta90: 3300,3500,3550,3630,3700,3750,3800 MHz



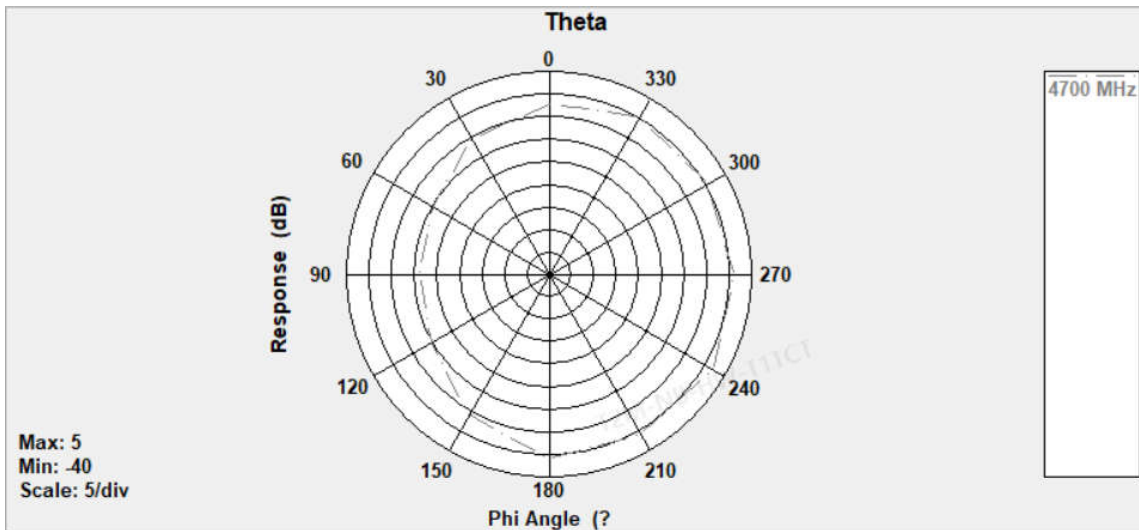
Phi0: 4700MHz



Phi90: 4700MHz

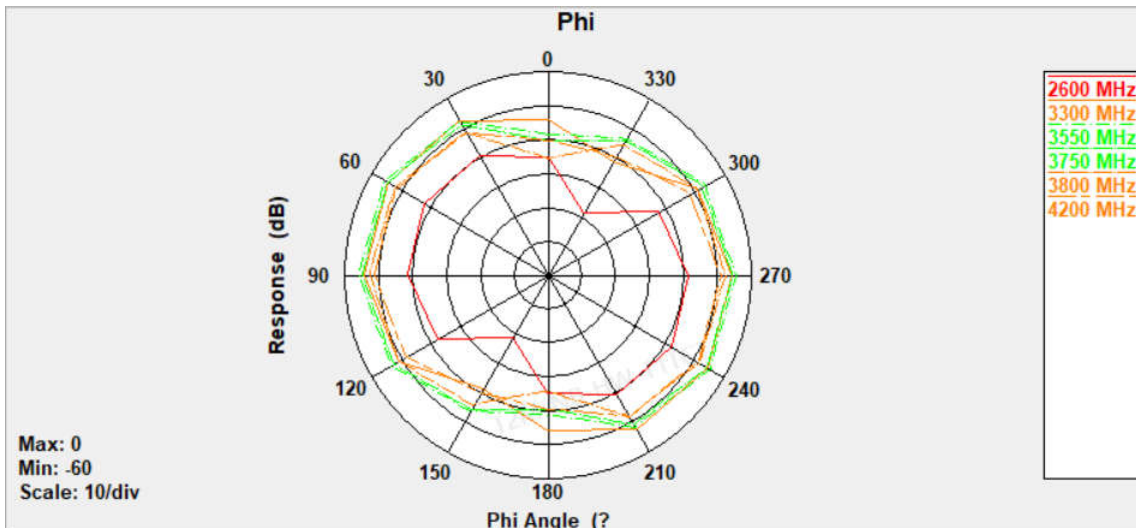


Theta90: 4700MHz

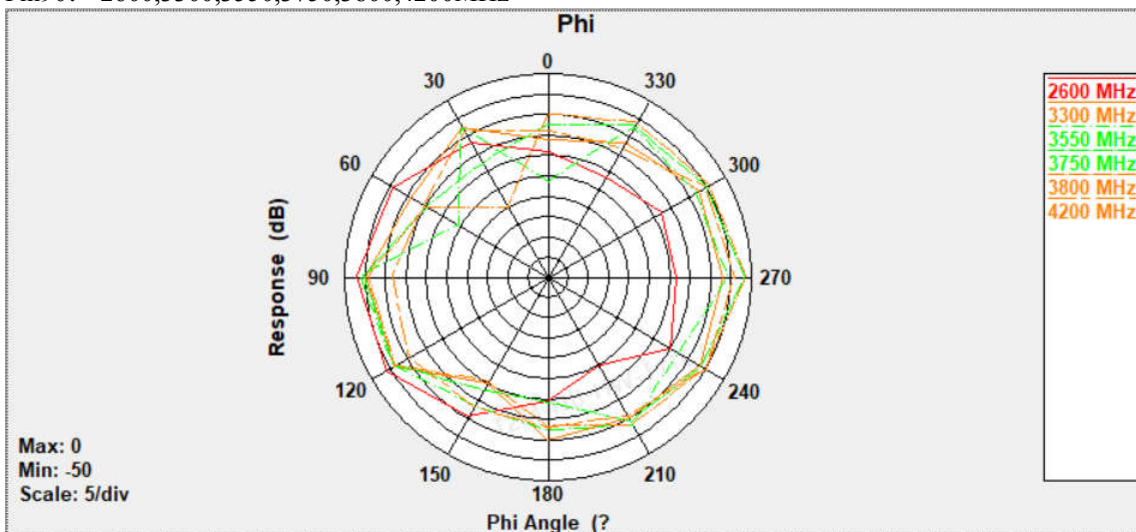


ANT4:

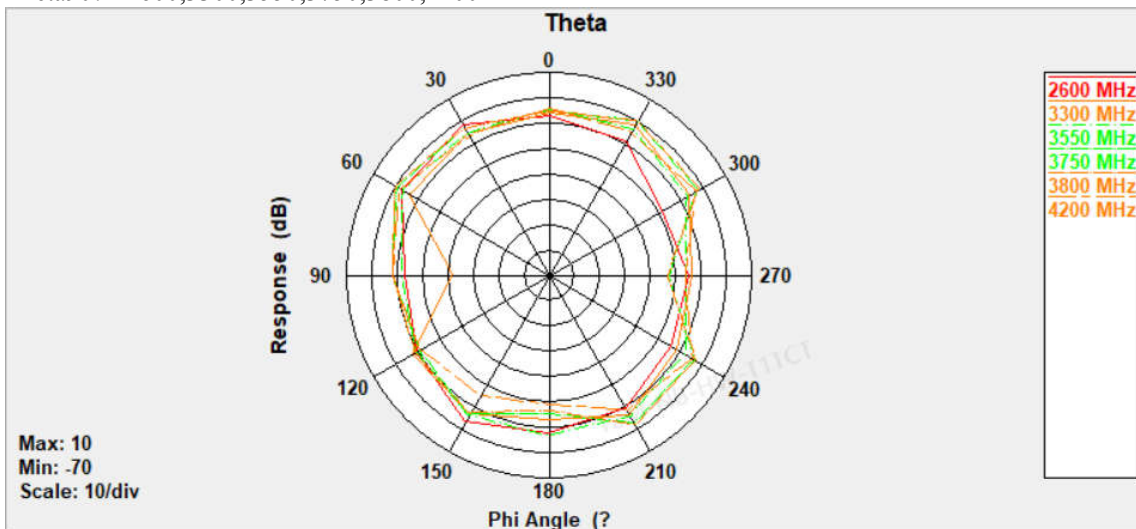
Phi0: 2600,3300,3550,3750,3800,4200MHz



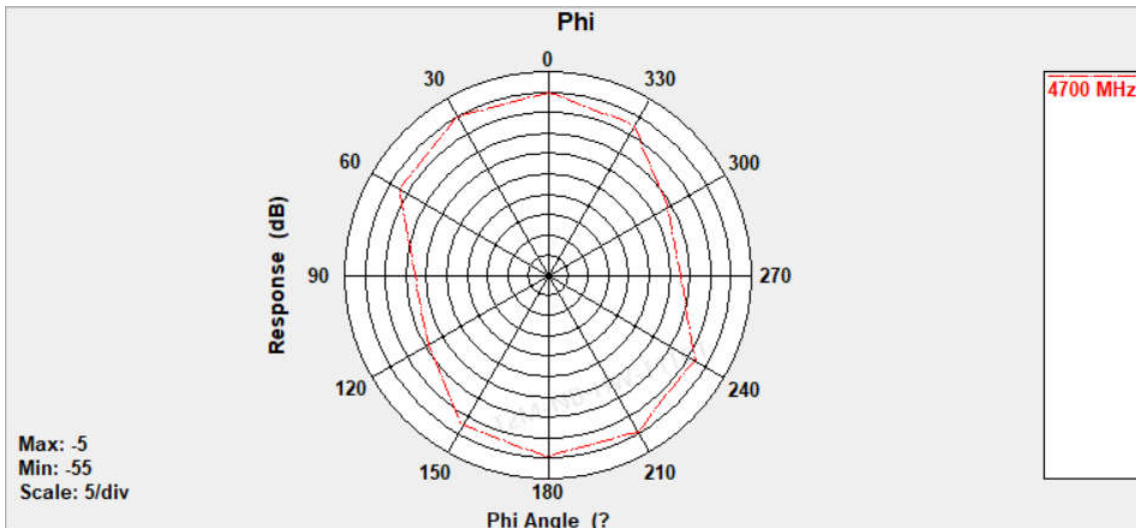
Phi90: 2600,3300,3550,3750,3800,4200MHz



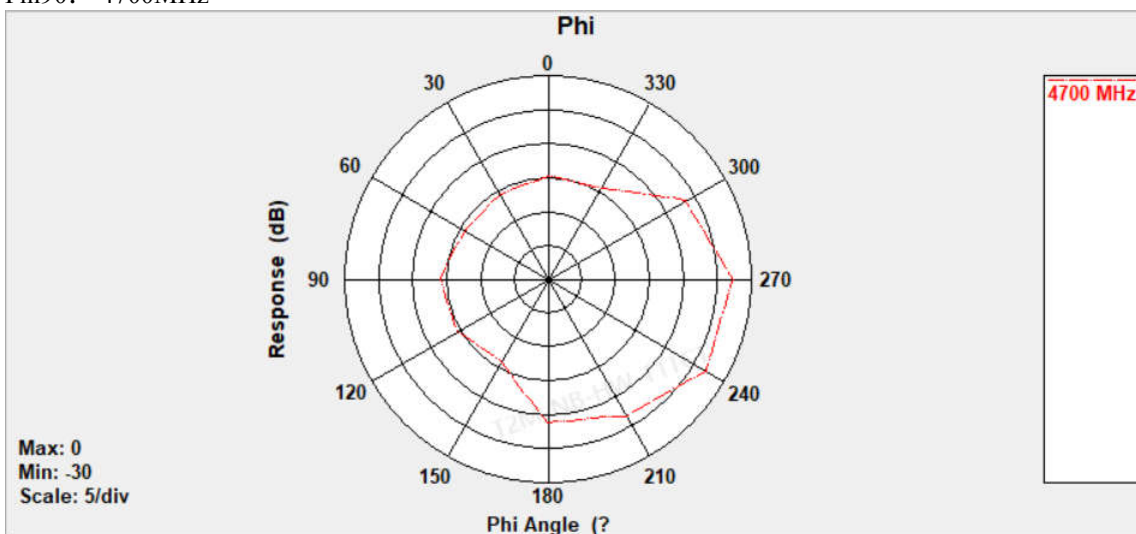
Theta90: 2600,3300,3550,3750,3800,4200MHz



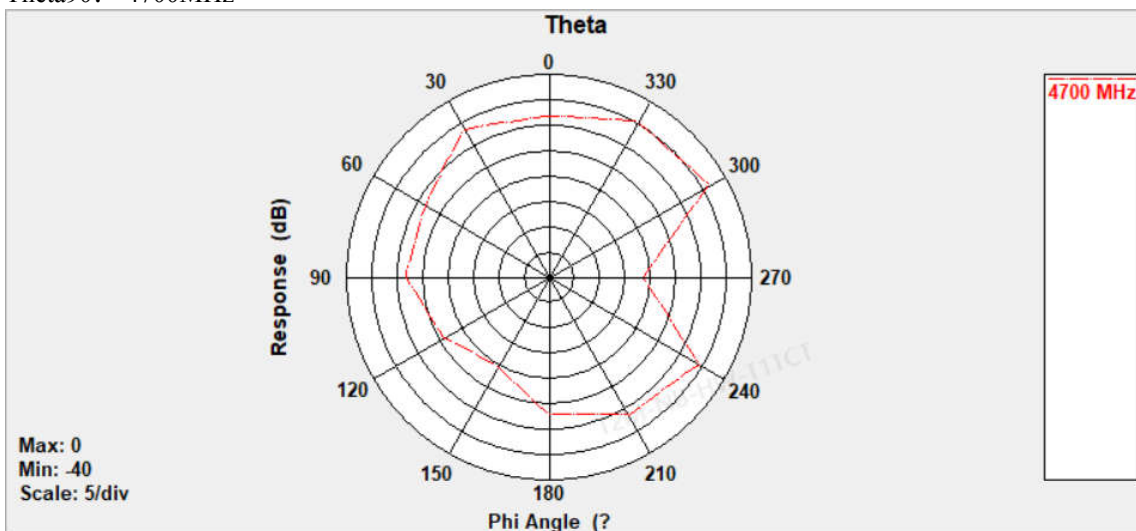
Phi0: 4700MHz



Phi90: 4700MHz

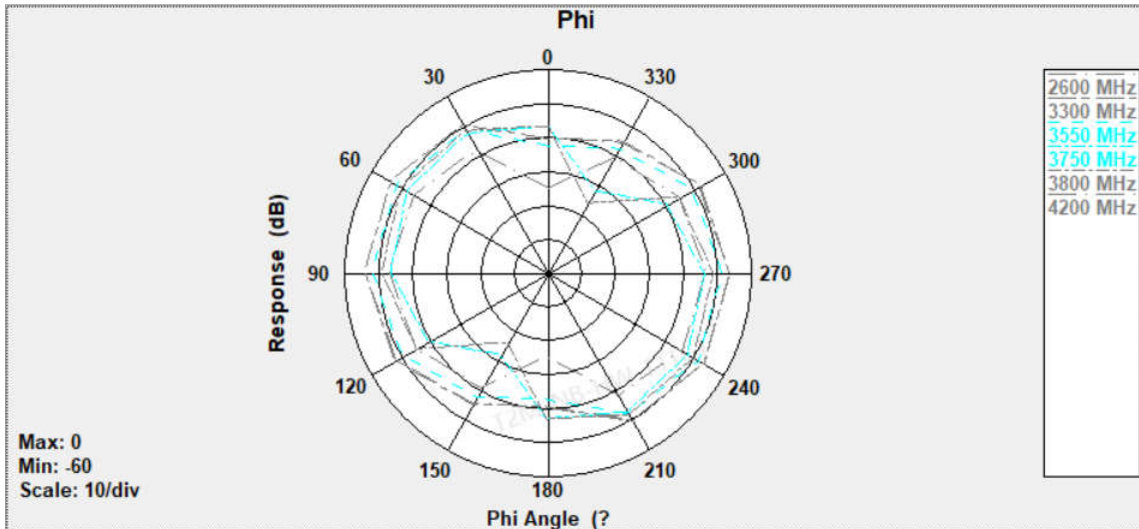


Theta90: 4700MHz

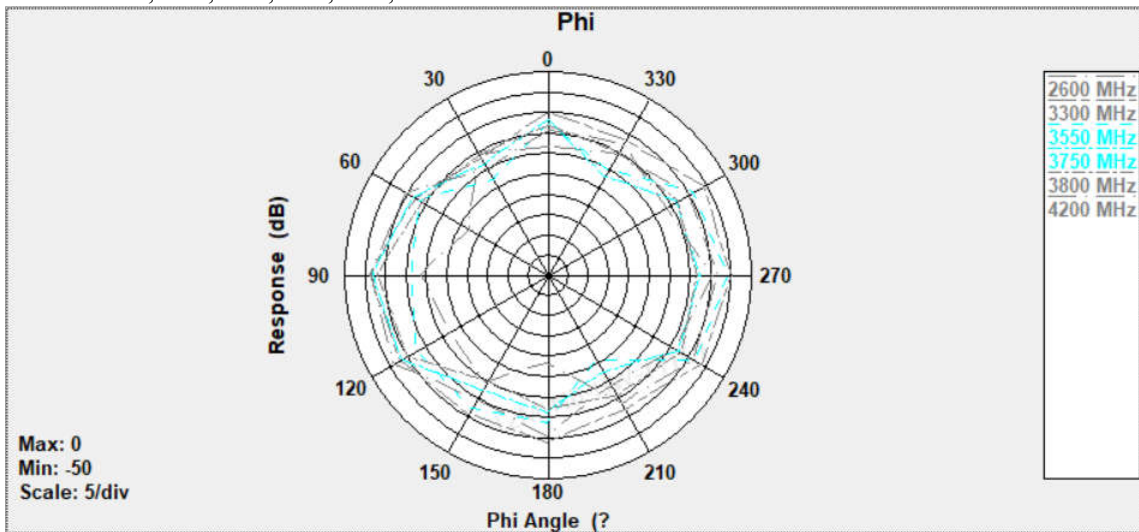


ANT5:

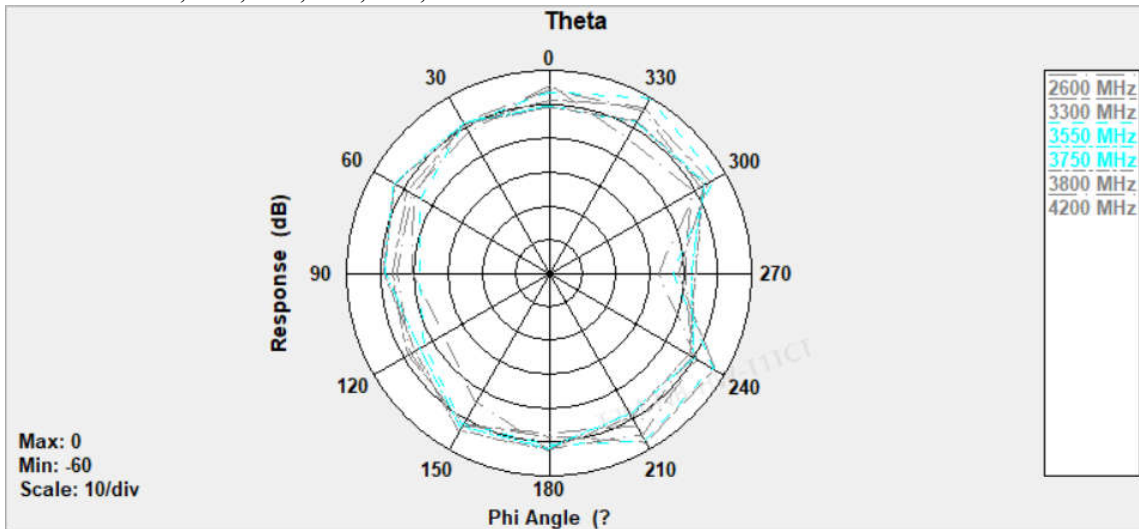
Phi0: 2600,3300,3550,3750,3800,4200MHz



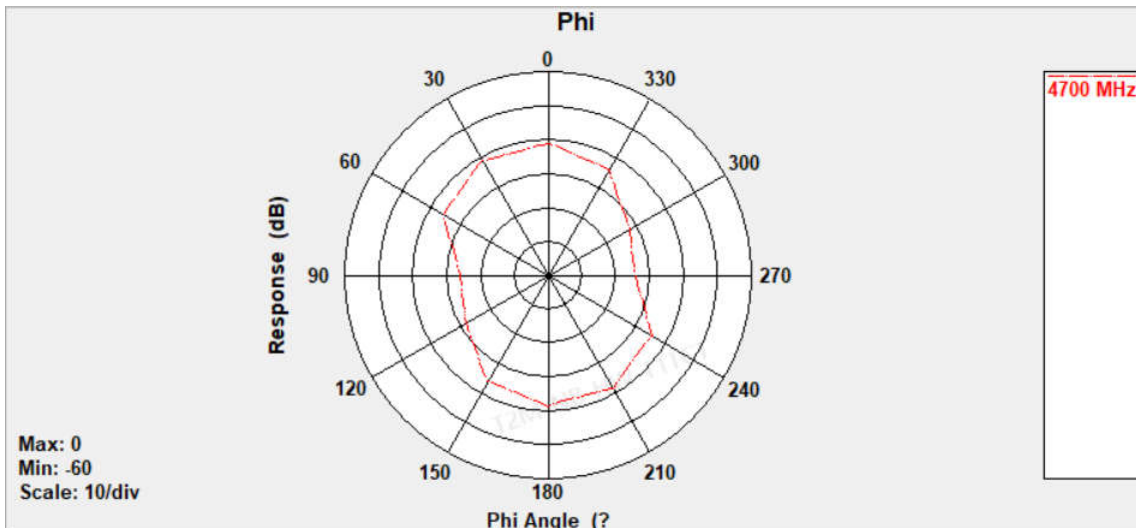
Phi90: 2600,3300,3550,3750,3800,4200MHz



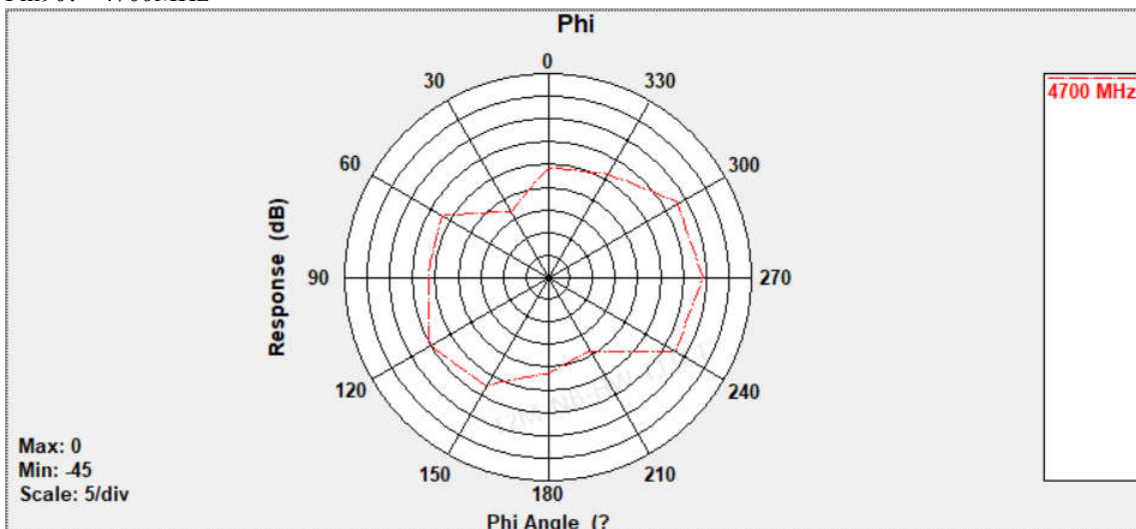
Theta90: 2600,3300,3550,3750,3800,4200MHz



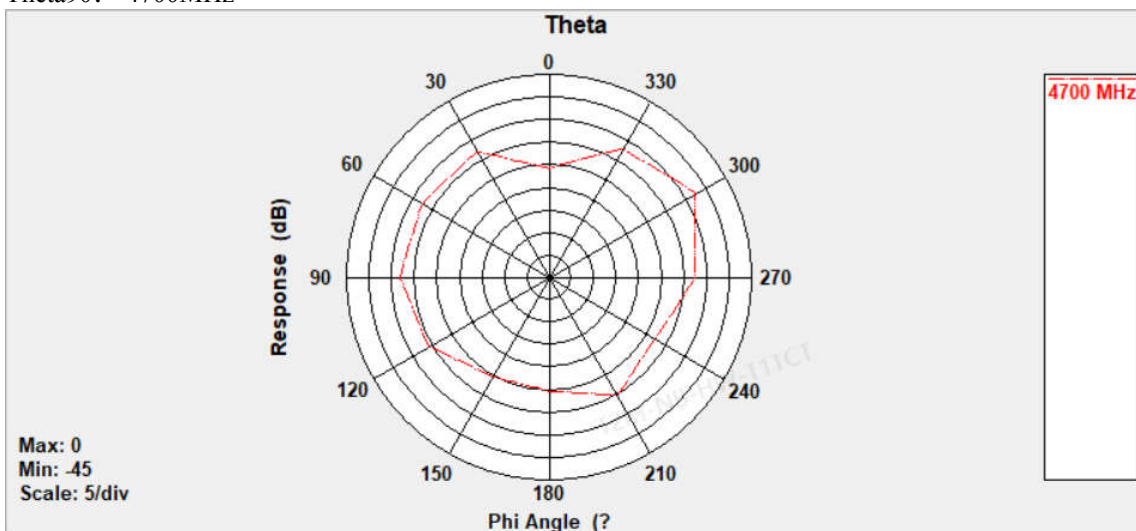
Phi0: 4700MHz



Phi90: 4700MHz

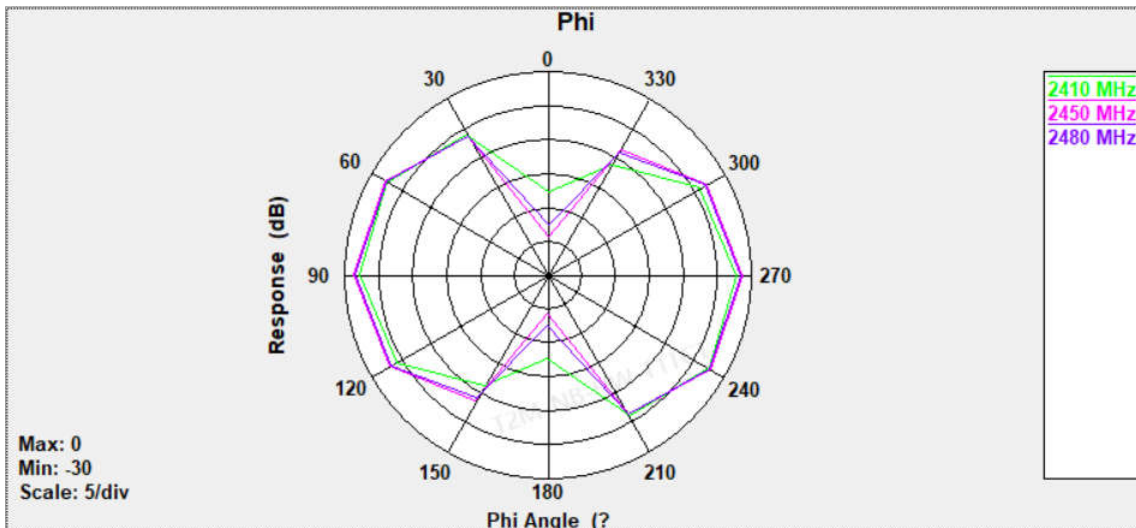


Theta90: 4700MHz

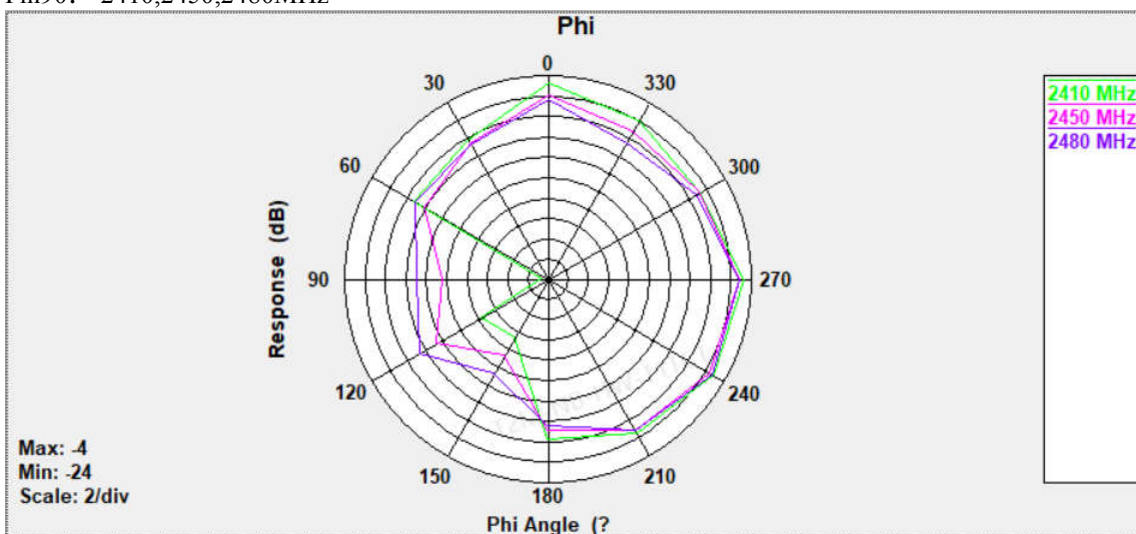


ANT6:

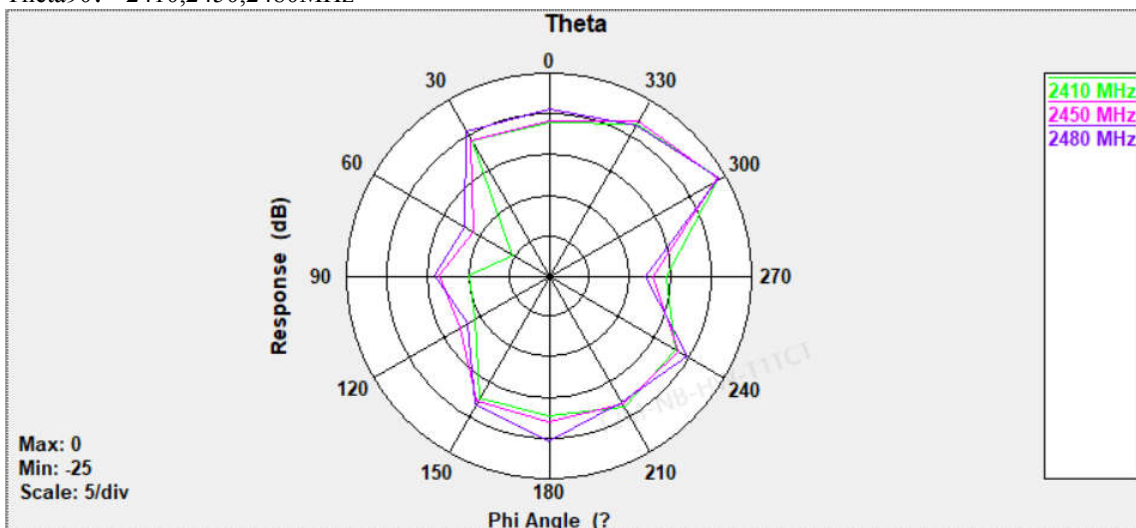
Phi0: 2410,2450,2480MHz



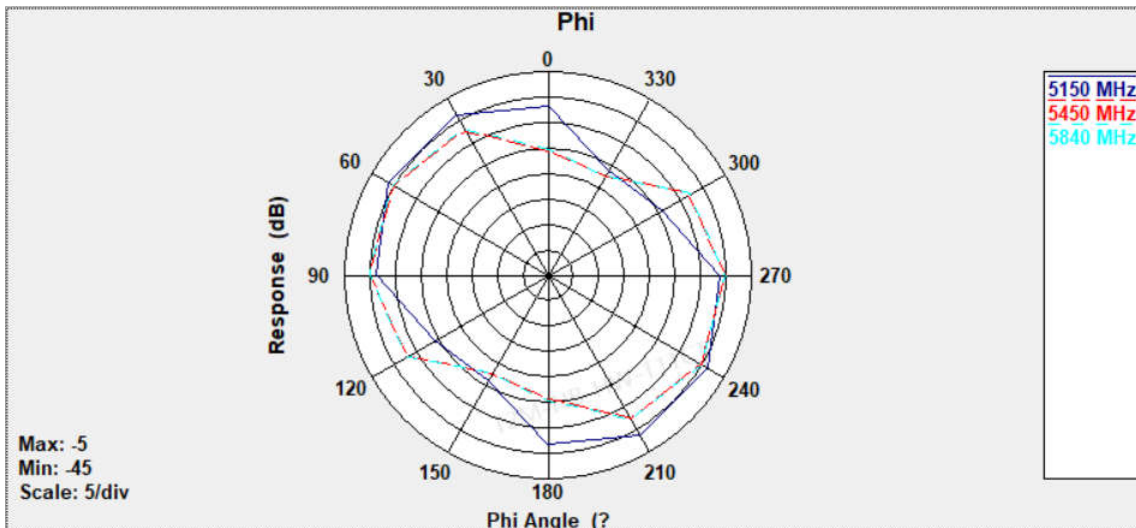
Phi90: 2410,2450,2480MHz



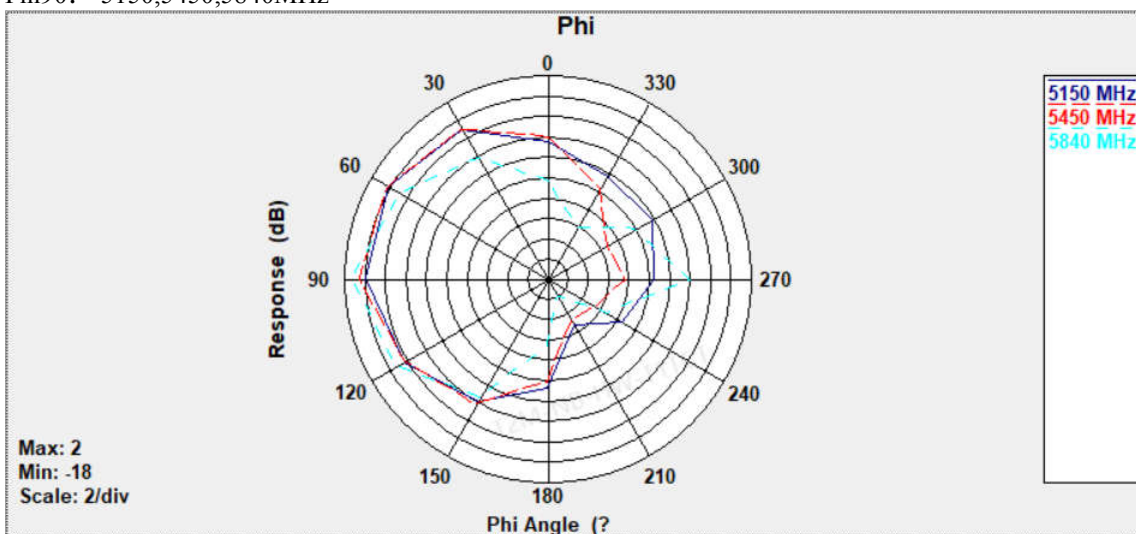
Theta90: 2410,2450,2480MHz



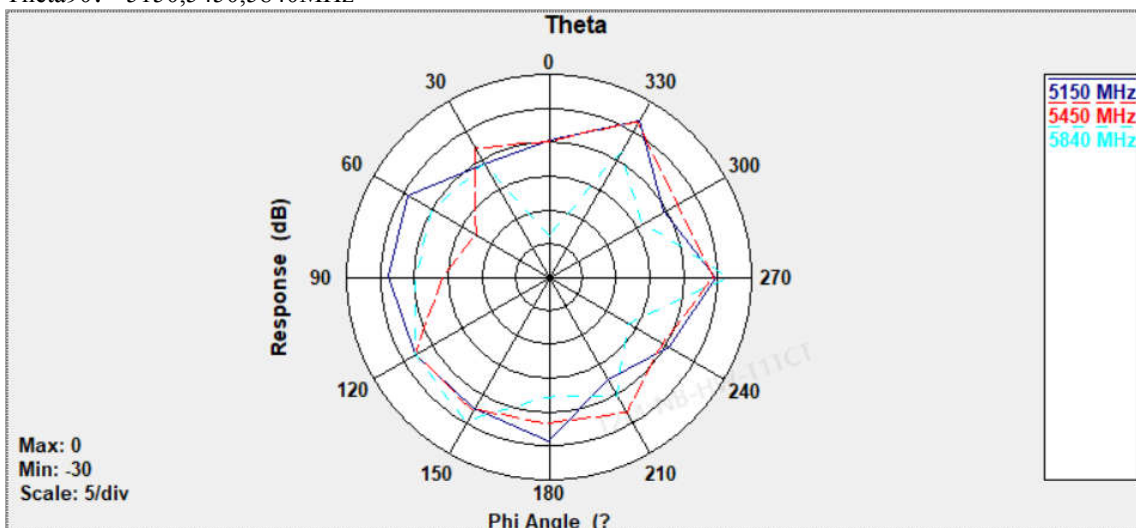
Phi0: 5150,5450,5840MHz



Phi90: 5150,5450,5840MHz

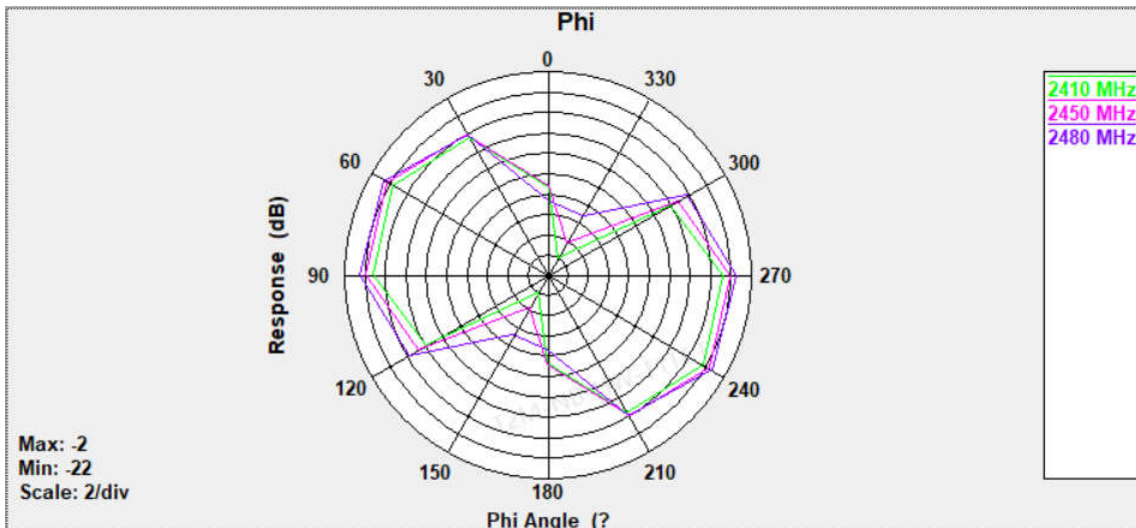


Theta90: 5150,5450,5840MHz

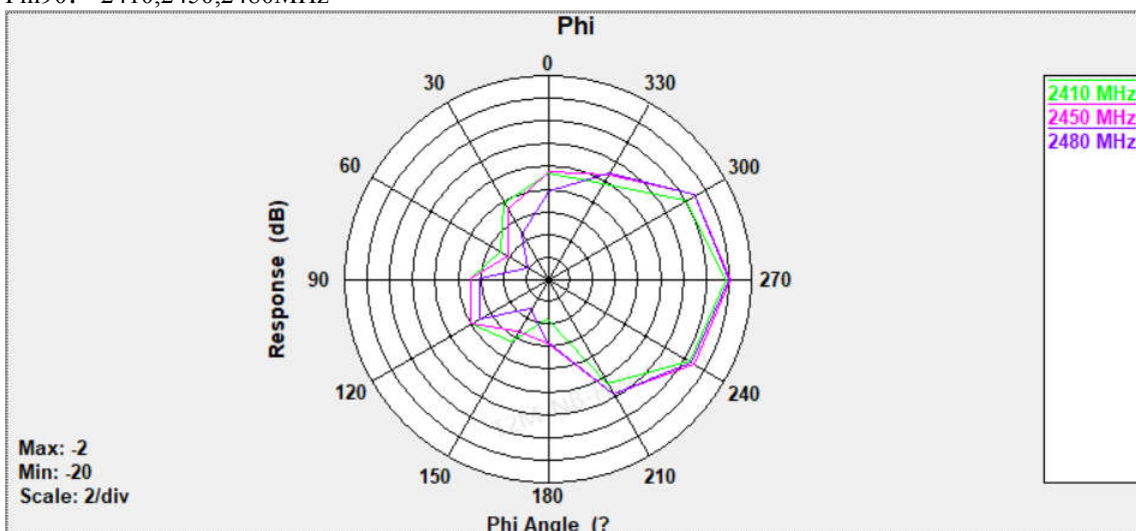


ANT7:

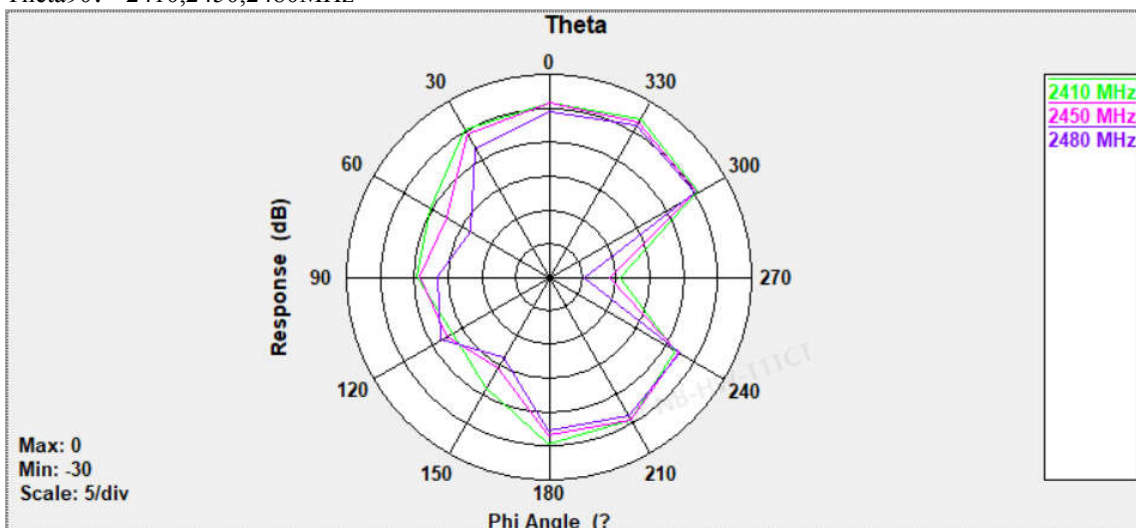
Phi0: 2410,2450,2480MHz



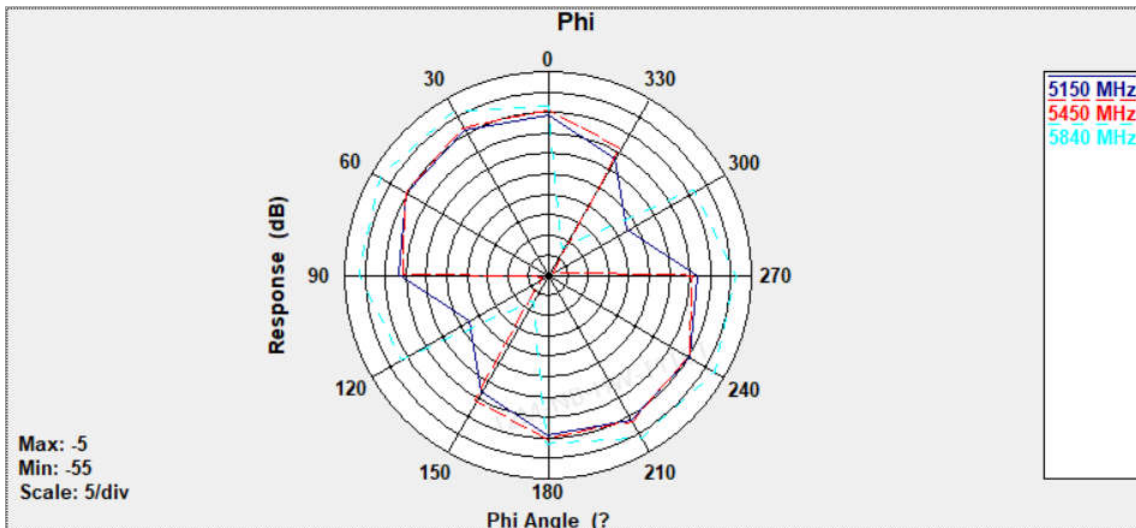
Phi90: 2410,2450,2480MHz



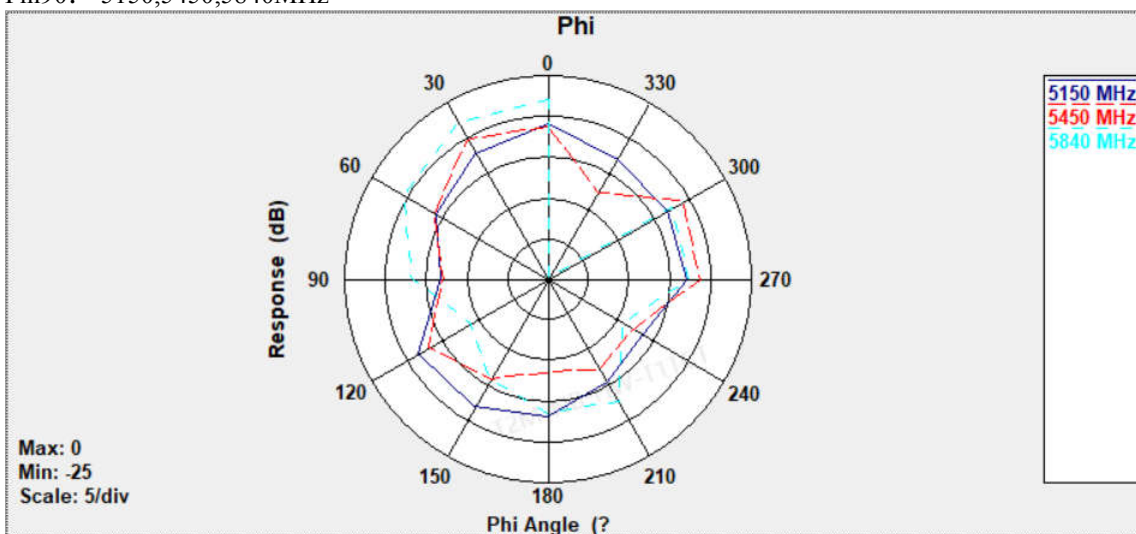
Theta90: 2410,2450,2480MHz



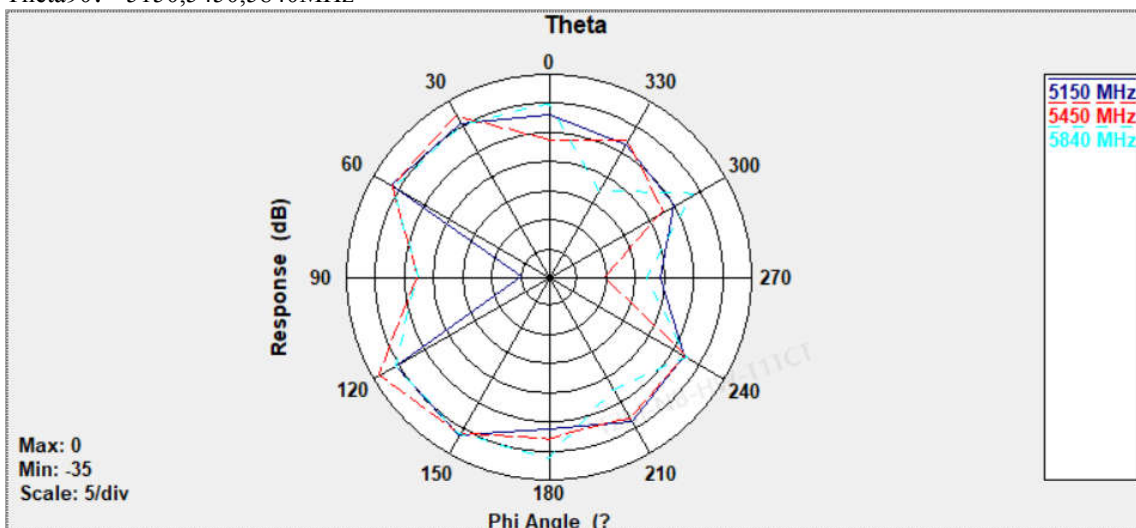
Phi0: 5150,5450,5840MHz



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

