

Feature

- ※ High gain
- ※ Omani-directional
- ※ Wide bandwidth

Application

※GSM850/900/DCS/PCS/WCDMA B1/B2/B4/B5/B8

LTE B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28/B38/B41/B42/B66/B71

NR Mode N1/N3/N5/N7/N8/N12/N20/N28/N38/N41/N66/N77/N78/N71

Name and address of the antenna manufacturer	Model number of the antenna
Welletronics Communication Technology Co.Ltd 502,Block A,Jingneng Menggu,Jinghai Road6,Yizhuang Economic and Technological Development Zone,Beijing Xi'an Yanta Street Yunshui all the way Xi'an Software New City Phase II A11	X6876-ANT13-RD-XX-XX (XX:Version-Date)

TYPE	
Transmitter Frequency	GSM 850/WCDMA B5/LTE B5 NR n5: 824 – 849 MHz
	GSM 900/WCDMA B8/LTE B8 NR n8: 880 – 915 MHz
	DCS /WCDMA B4/LTE B3/B4/B66 NR n3/n66: 1710 – 1785 MHz
	PCS/WCDMA B2/LTE B2:1850-1910MHz
	WCDMA B1/LTE B1 NR n1: 1920 – 1980MHz

		LTE B7 NR n7:2496-2565MHz
		LTE B38/B41 NR n38/n41:2565-2645MHz
		LTE B20 NR n20:832-862MHz
		LTE B12/B17/B28 NR n12/n28:710-755MHz
		LTE B42/NR n77/n78:3300-4200MHz
		LTE B71/NR n71:663-697MHz
Receiver Frequency		GSM 850/WCDMA B5/LTE B5 NR n5: 869 - 894 MHz
		GSM 900/WCDMA B8/LTE B8 NR n8: 925 - 960 MHz
		DCS/LTE B3/B66 NR n3/n66: 1805 - 1880 MHz
		WCDMA 4/LTE B4 NR n4: 2110-2155 MHz
		PCS/WCDMA B2/LTE B2:1930-1990MHz
		WCDMA B1/LTE B1 NR n1: 2110 - 2170MHz
		LTE B7 NR n7:2620-2690MHz
		LTE B38/41 NR n38/n41:2565-2645MHz
		LTE B20 NR n20:791-821MHz
		LTE B12/B17/B28 NR n12/n28:758-803MHz
		LTE B42/NR n77/n78:3300-4200MHz
		LTE B71/NR n71:617-651MHz
RF-Output Power (E.I.R.P)		GSM850/900: 32+/-2dBm
		DCS/PCS: 30+/-2dBm
		LTE B1/B2/B3/ B4/B5 /B7/B8/B17/B20/B28/B38/B41/B66/B71: 23+/-2dBm
		WCDMA B1/B2/B4/B5/ B8: 23+/-2dBm
		NR N1/N3/ N5 /N7/N8/N12/N20/N28/N38/N41/N66/N71: 23+/-2dBm
		NR N77/N78:24+/-2dBm
Antenna Average Gain	ANT0(N77/78 DRX MIMO)	LTE B42, NR77/78:0.42dbi
	ANT1(MHB DRX)	WCDMA B1 , LTE B1, NR n1:-2.4dbi
		DCS, LTE B3/4/66, NR n3/66:-4dbi
		PCS/WCDMA B2/LTE B2 :-4.9dbi
	ANT2 (LB	LTE B12/B17/B28 NR n12/n28:-6.3dbi

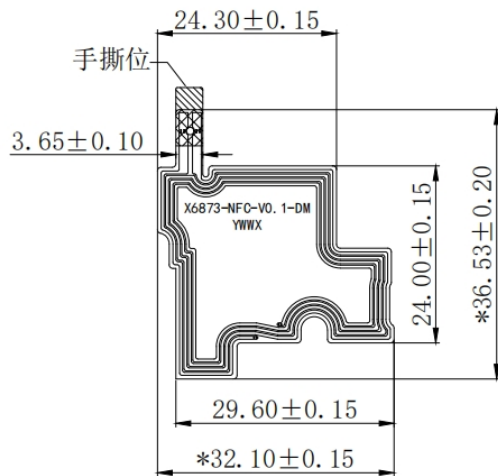
Type of Modulation	DRX)	LTE B71/NR n71:-9dBi
		GSM 850, WCDMA B5, LTE B5 NR n5: -5.2dbi
		GSM900, WCDMA B8, LTE B8 NR n8:-5.8dbi
	ANT3(MHB DRX MIMO)	WCDMA B1 , LTE B1, NR n1:-4.8dbi
		DCS, LTE B3/4/66, NR n3/66:-4.2dbi
		PCS/WCDMA B2/LTE B2 :-5.6dbi
	ANT4 (LB PRX)	LTE B12/B17/B28 NR n12/n28:-6.3dbi
		LTE B71/NR n71:-8.2dBi
		GSM 850, WCDMA B5, LTE B5 B20 NR n5 N20:-6.9dbi
		GSM900, WCDMA B8, LTE B8 NR n8:-6.5dbi
	ANT5 (MHB PRX MIMO)	DCS /WCDMA B4/LTE B3/B4/B66 NR n3/n66: 1.7 dBi
		PCS/WCDMA B2/LTE B2: -7 dBi
	ANT6(N77/78 PRX2)	LTE B42, NR77/78:-4.6dbi
	ANT7(N77/78 PRX)	LTE B42, NR77/78:-1.3dbi
	ANT8(MHB PRX)	PCS/WCDMA B1/B2/LTE B1/B2/N1/N2:-2.7dbi
		DCS /LTE B3/B4/B66/ N3/N4N66:-2.3dbi
		LTE B7/B38/B41/N7N38/N41:-0.8dbi
	ANT9(N77/78 DRX)	LTE B42, NR77/78:-1dbi
	ANT12	GPS L1:-2.7dbi
		WIFI 2.4G MIMO1:-3.1dbi
	ANT14	WIFI 2.4G MIMO2/BT:-1.4dbi WIFI 5G MIMO2:-0.6dbi

Antenna type

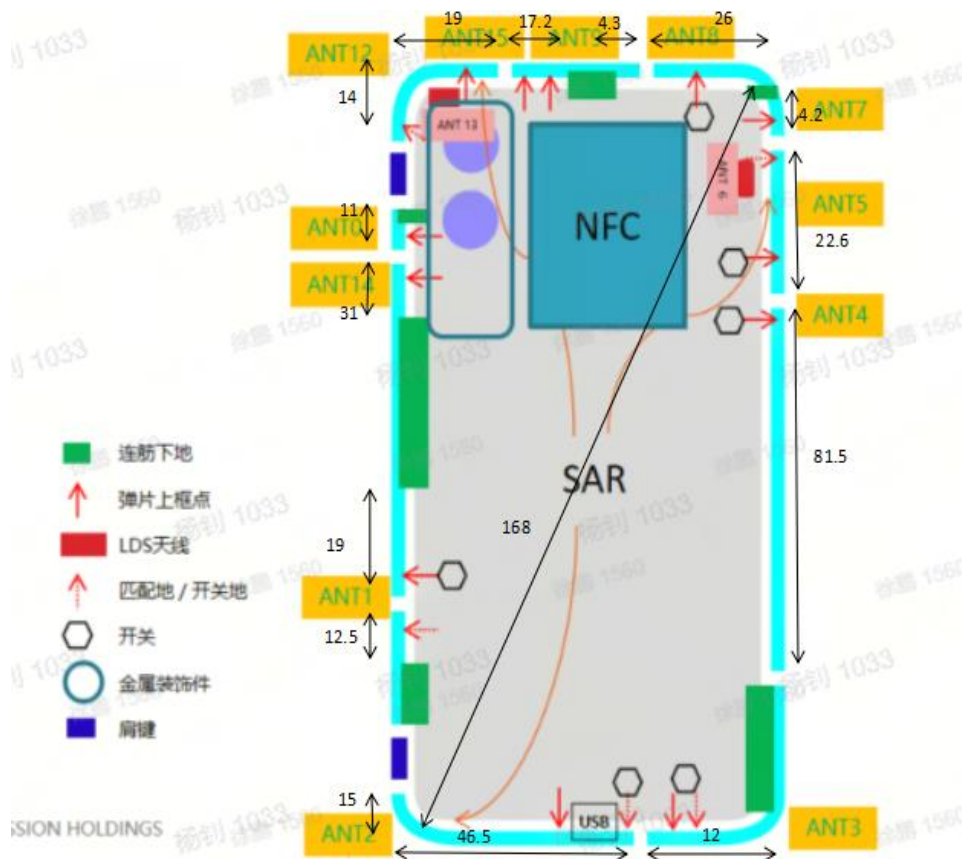
RF Internal Antenna

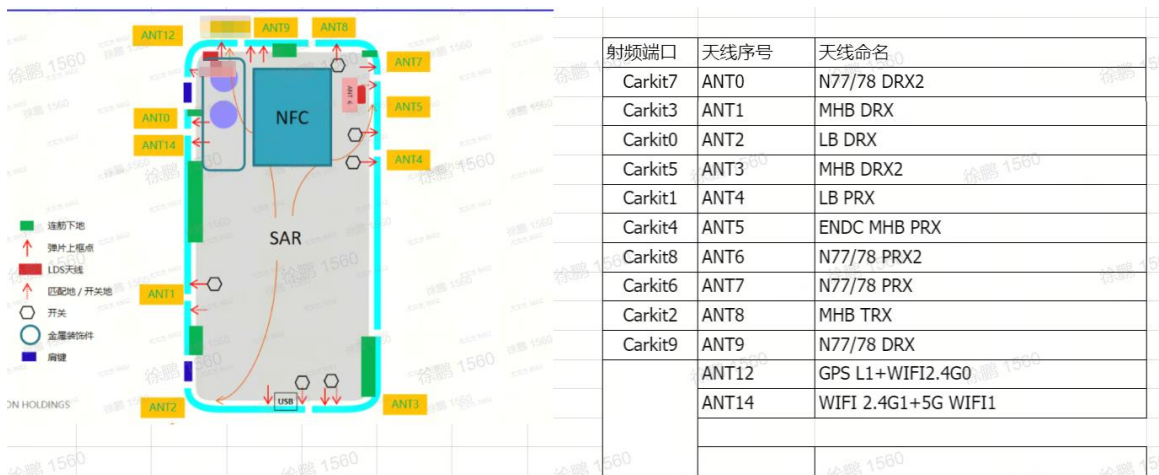
NFC Internal Antenna

NFC Dimensions



Antenna location map



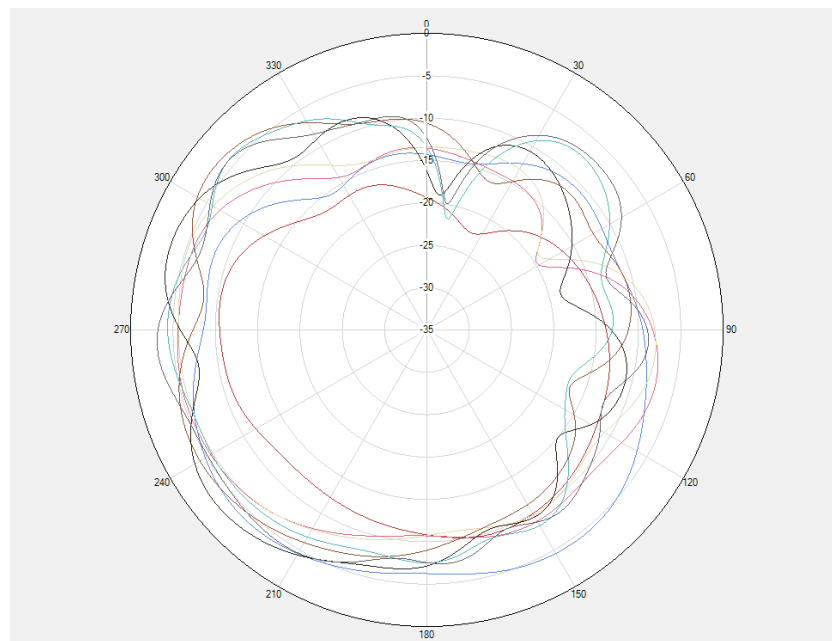


Antenna	Support Band
Ant 0	4G:B42 RX 5G SA:N77/78 RX
Ant 1	2G:GSM1800/1900 RX 3G:WCDMA1/2/4 RX 4G:B1/2/3/4/7/38/41/66 RX 5G SA:N1/3/7/38/41/66 RX
Ant 2	2G:GSM850/900 RX 3G:WCDMA5/8 RX 4G:B5/8/20/28/12/17/71 RX 5G SA:N5/8/20/28/12/71 RX
Ant 3	4G:B1/2/3/4/7/38/41/66 RX 5G SA:N1/3/7/38/41/66 RX
Ant 4	2G:GSM850/900 TX 3G:WCDMA5/8 TX 4G:B5/8/20/28/12/17/71 TX 5G SA:N5/8/20/28/12/71 TX
Ant 5	4G:B1/3/4/7/38/41/66 RX 5G SA:N1/3/7/38/41/66 RX 4G NSA:B1/3/7/38/41/66 TX
Ant 6	4G:B42 RX 5G SA:N77/78 RX
Ant 7	4G:B42 TX 5G SA:N77/78 TX
Ant 8	2G:GSM1800/1900 TX 3G:WCDMA1/2/4 TX 4G:B1/2/3/4/7/38/41/66 TX 5G SA:N1/3/7/38/41/66 TX
Ant 9	4G:B42 RX 5G SA:N77/78 RX

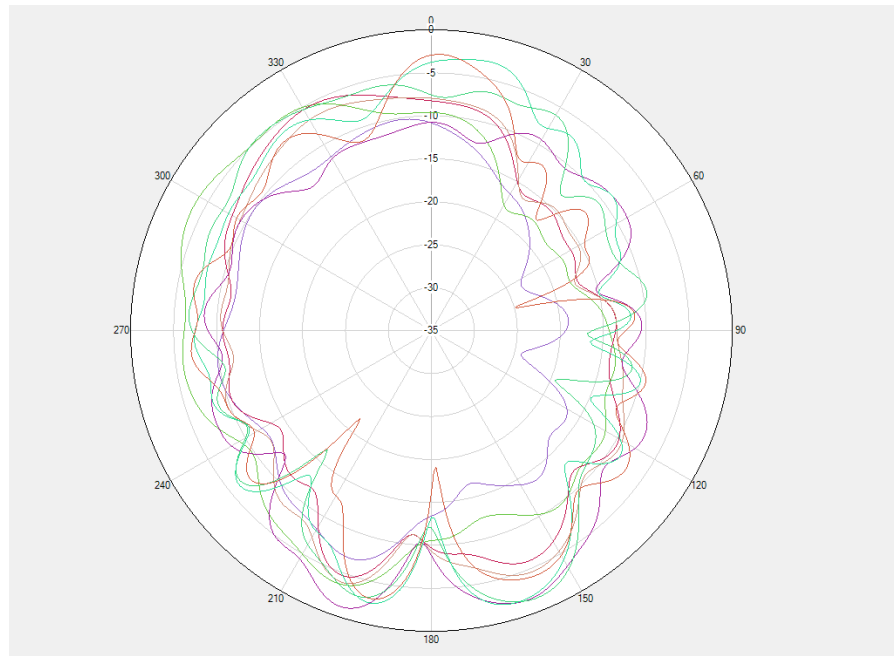
Ant 12	GPS L1 +WIFI 2.4G(chain1)
Ant 14	WIFI 2.4G(chain0)/BT+WIFI 5G

※ Antenna Gain

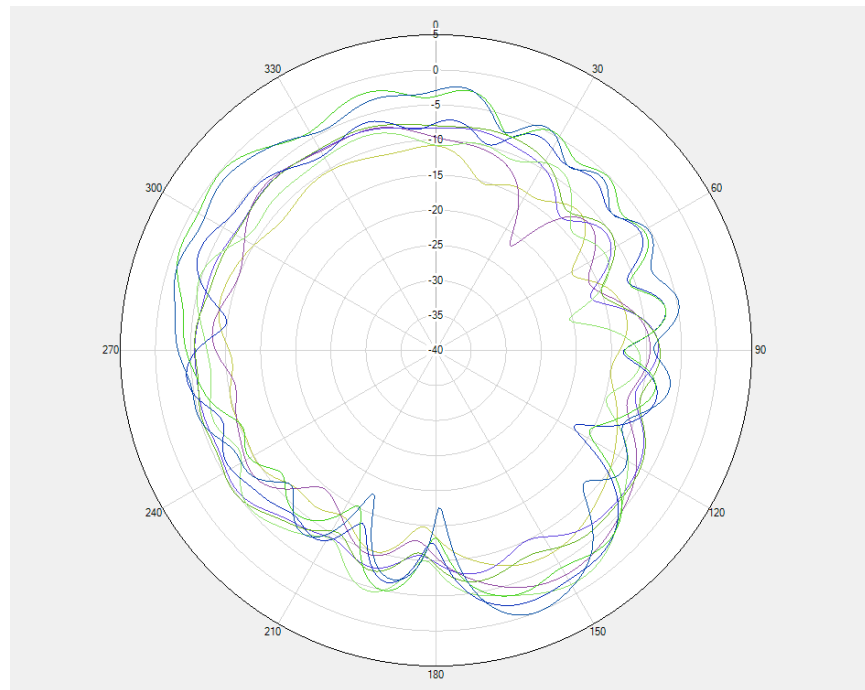
ANT0



B42/N77/78&wifi 5G Phi=0deg



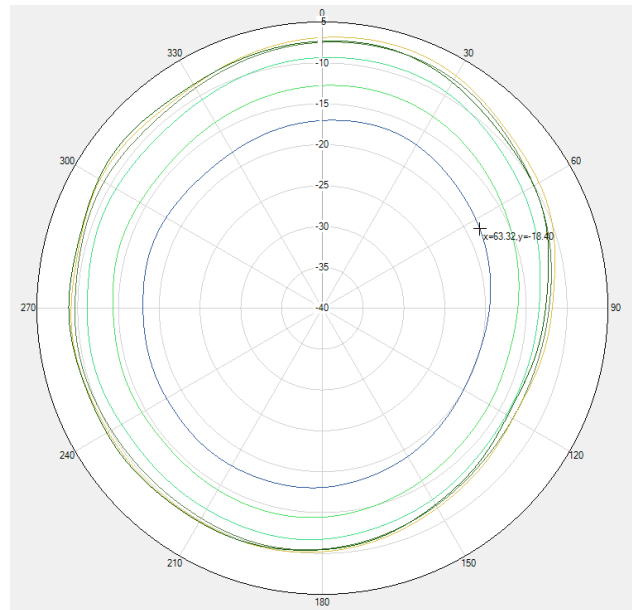
B42/N77/78&wifi 5G Phi=90deg



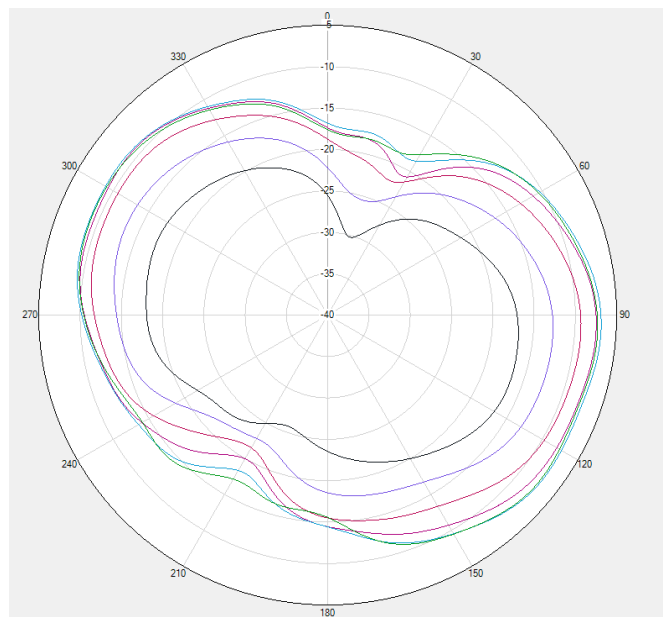
B42/N77/78&wifi 5G Theta=90deg

※ Antenna Gain

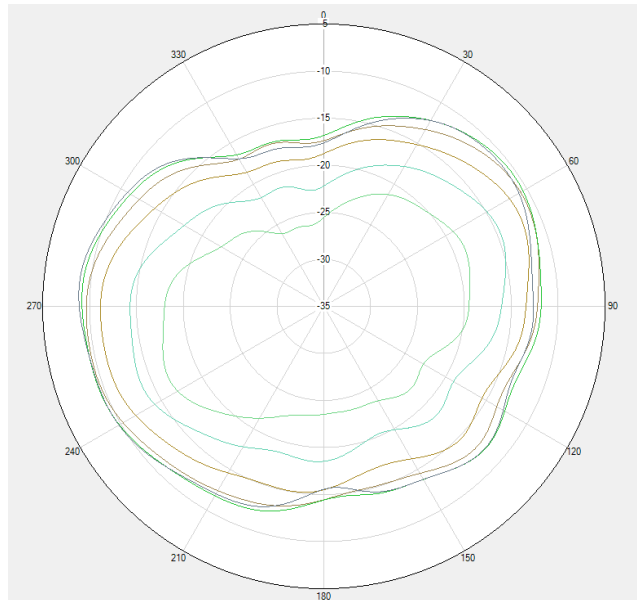
ANT1



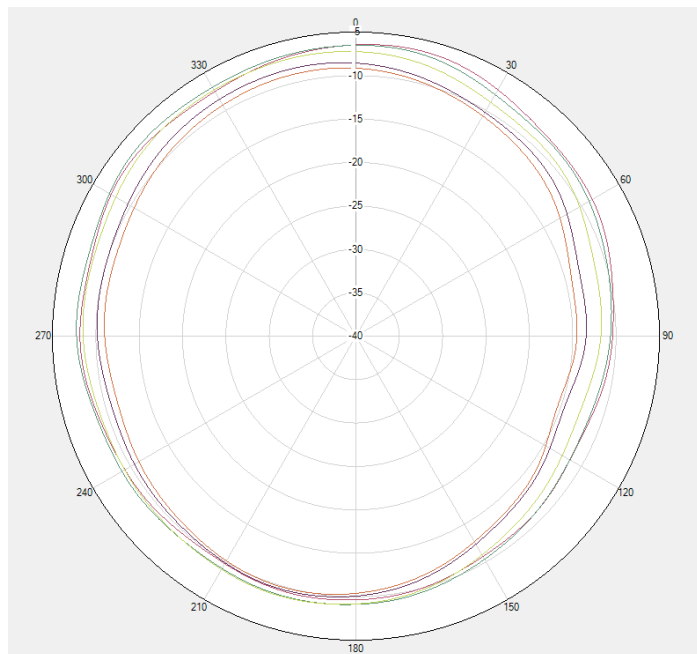
DCS /WCDMA B4/LTE B3/B4/B66 NR n3/n66 Phi=0deg



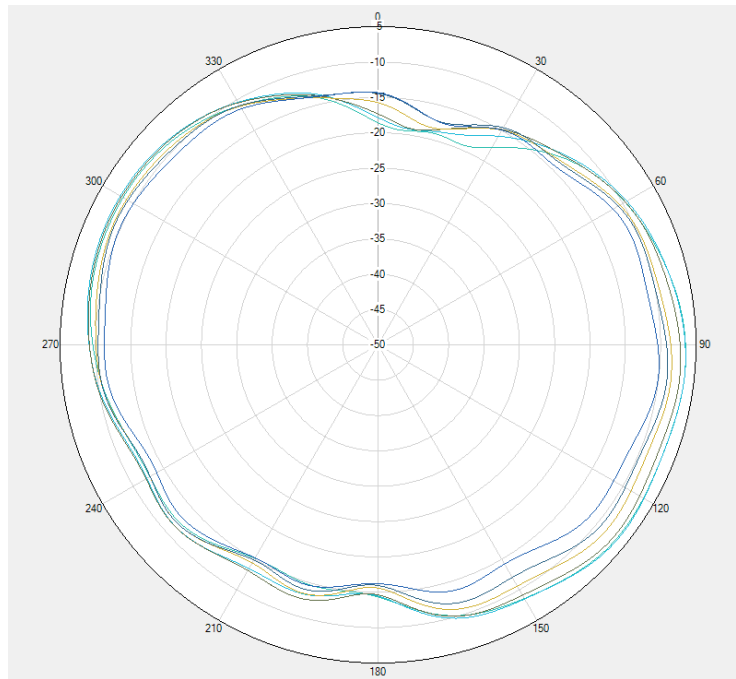
DCS /WCDMA B4/LTE B3/B4/B66 NR n3/n66 Phi=90deg



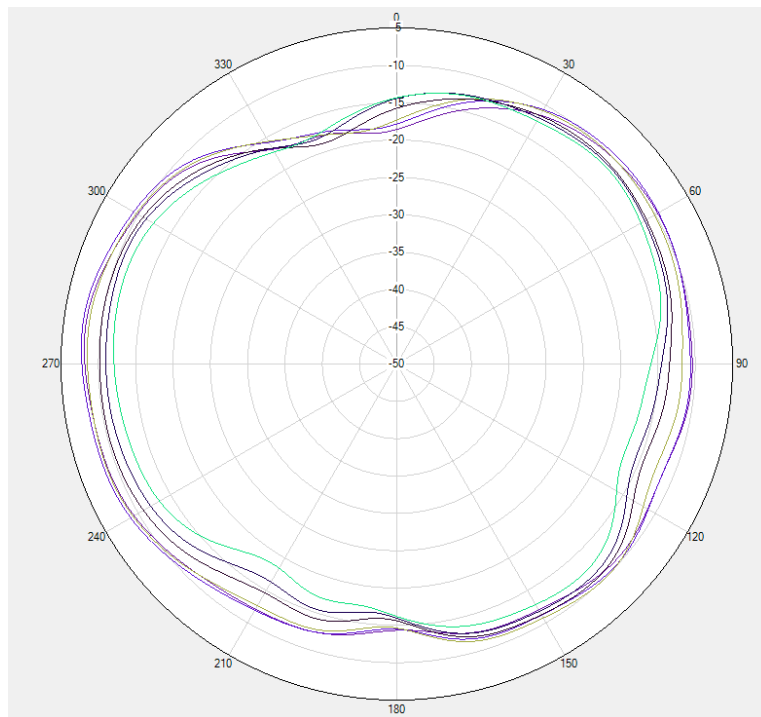
DCS /WCDMA B4/LTE B3/B4/B66 NR n3/n66 Theta=90deg



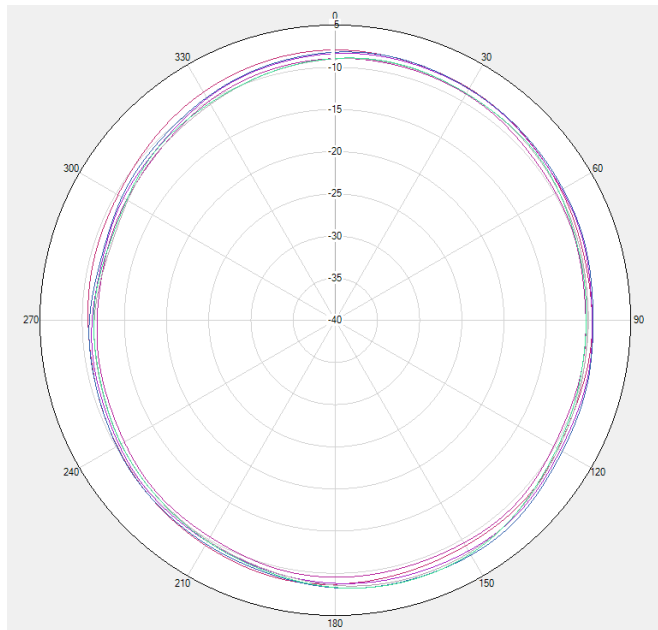
WCDMA B1 , LTE B1, NR n1 Phi=0deg



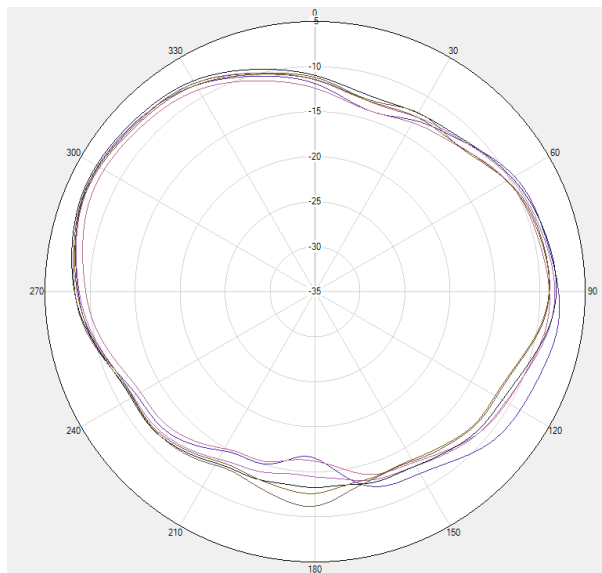
WCDMA B1 , LTE B1, NR n1 Phi=90deg



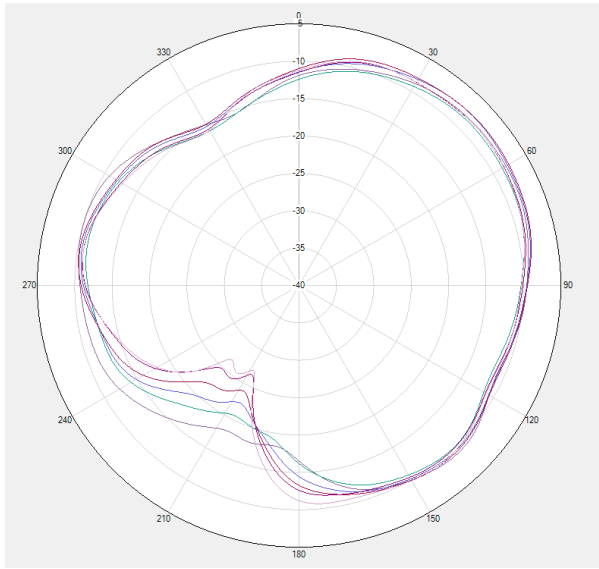
WCDMA B1 , LTE B1, NR n1 Theta=90deg



PCS/WCDMA B2/LTE B2 $\Phi=0\text{deg}$

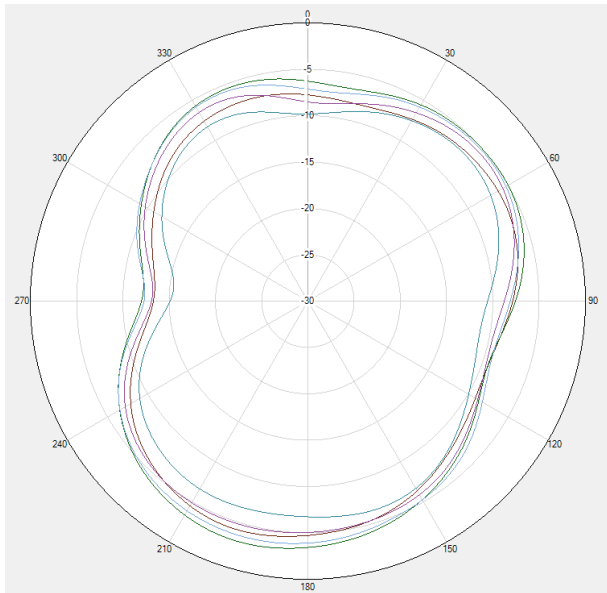


PCS/WCDMA B2/LTE B2 $\Phi=90\text{deg}$

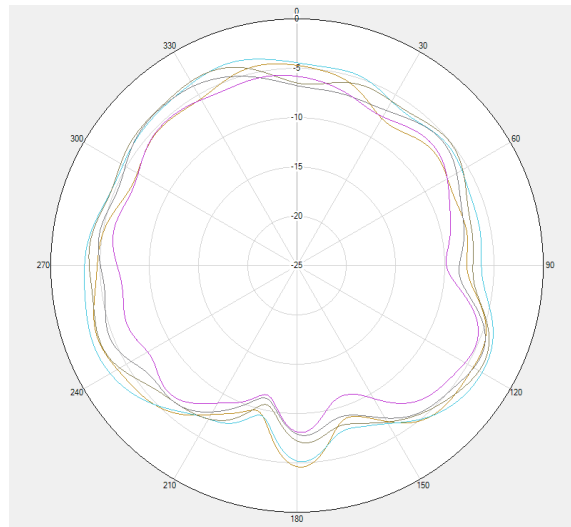


PCS/WCDMA B2/LTE B2 Theta=90deg

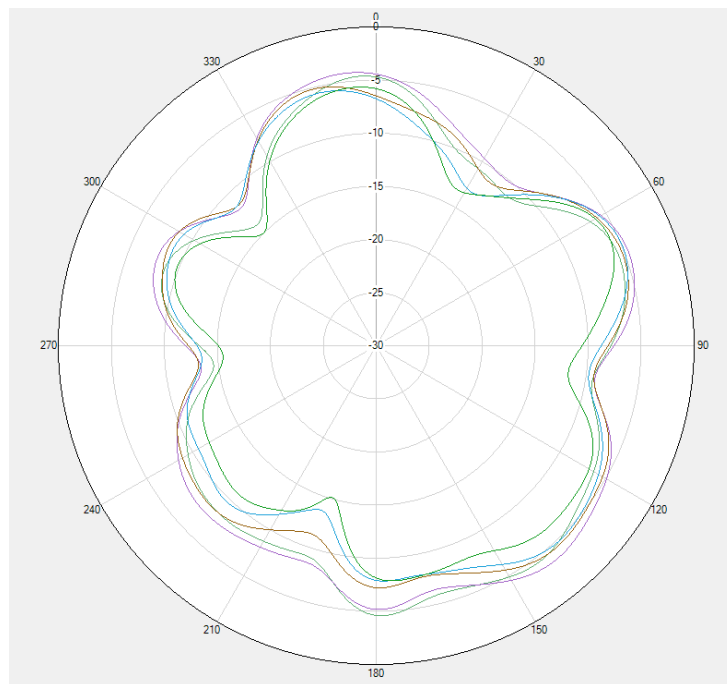
ANT2



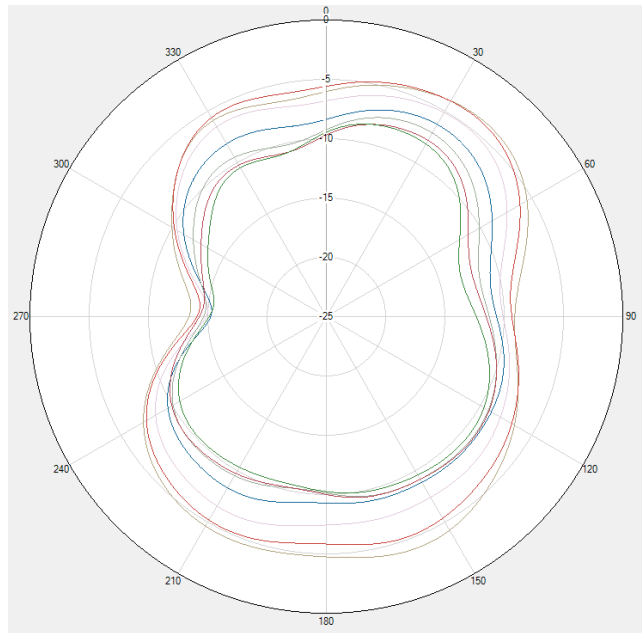
GSM900,B8,N8,WB8 Phi=0deg



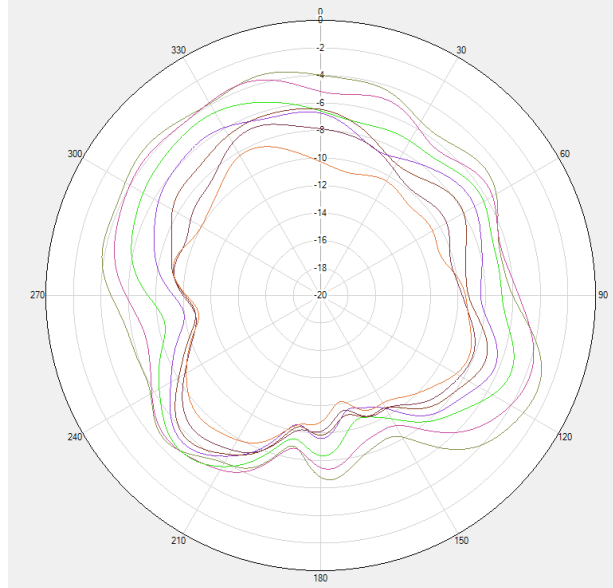
GSM900,B8,N8,WB8 Phi=90deg



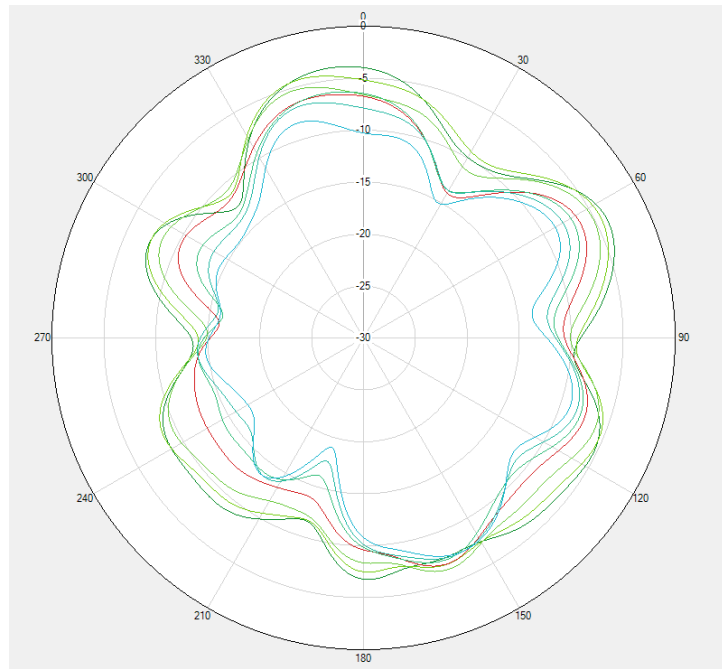
GSM900,B8,N8,WB8 Theta=90deg



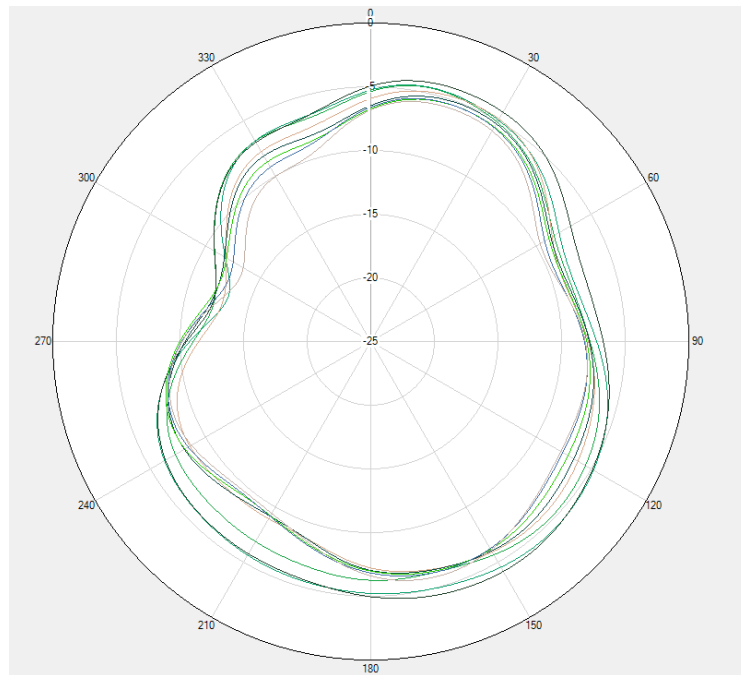
GSM 850, WCDMA B5, LTE B5 NR n5 $\Phi = 0^\circ$



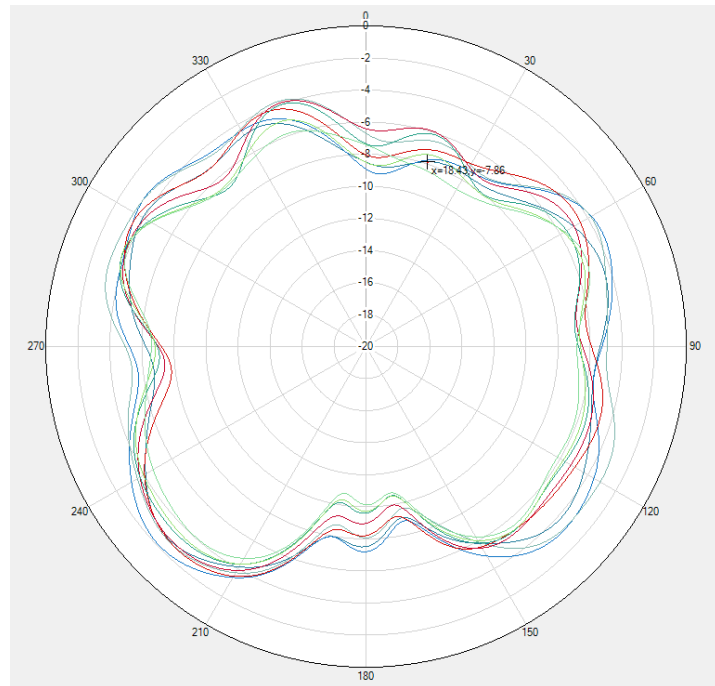
GSM 850, WCDMA B5, LTE B5 NR n5 $\Phi = 90^\circ$



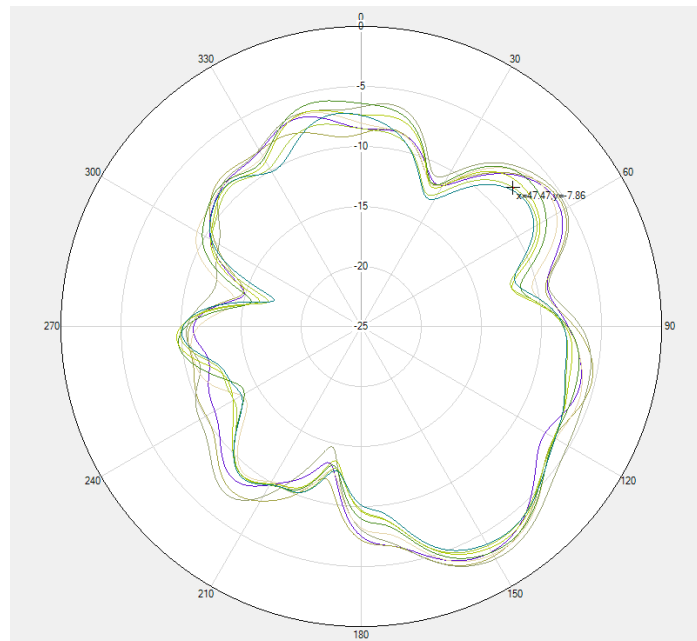
GSM 850, WCDMA B5, LTE B5 NR n5 Theta=90deg



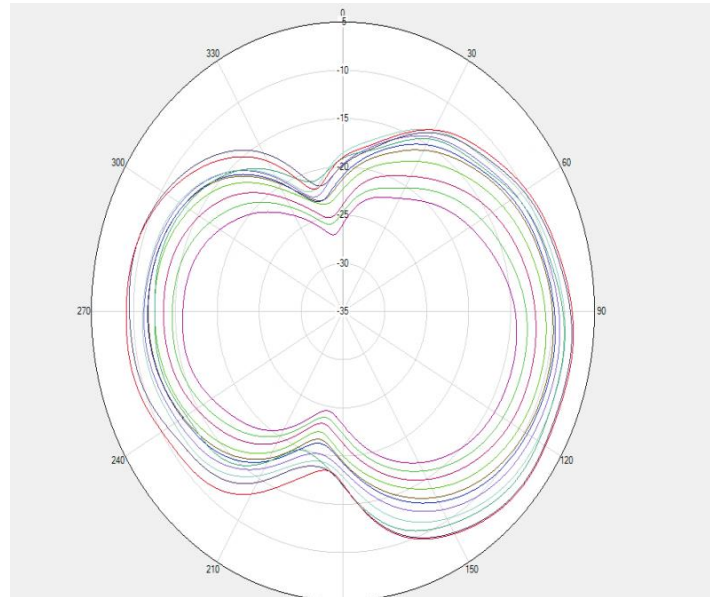
LTE B12/B17/B28 NR n12/n28 Phi=0deg



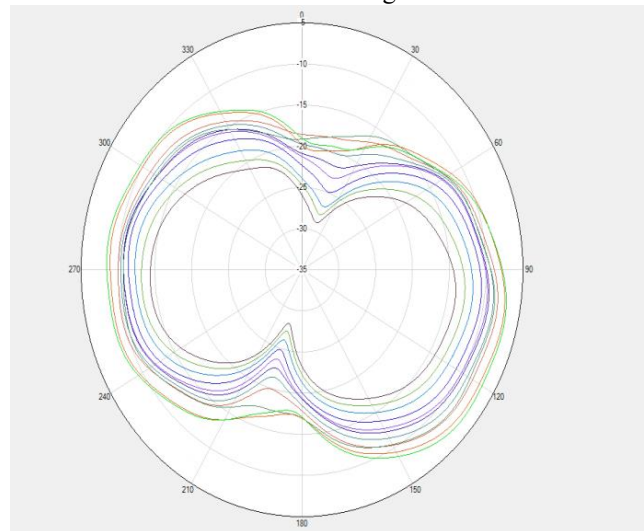
LTE B12/B17/B28/ NR n12/n28 $\Phi=90^\circ$



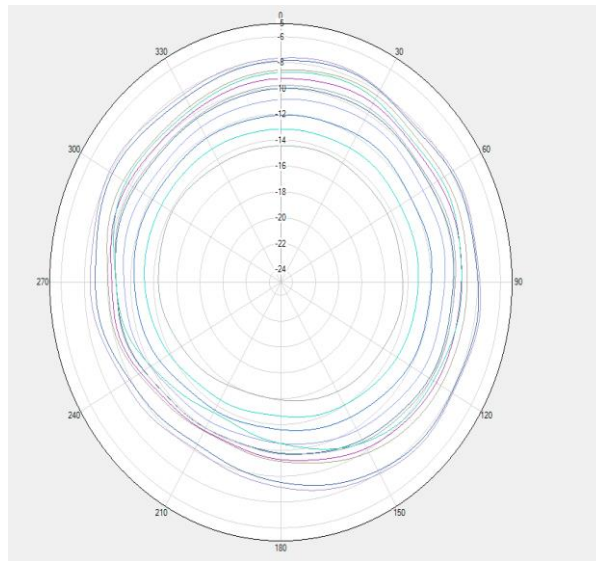
LTE B12/B17/B28 NR n12/n28 $\Theta=90^\circ$



LTE B71 NR n71 $\Phi=0^\circ$



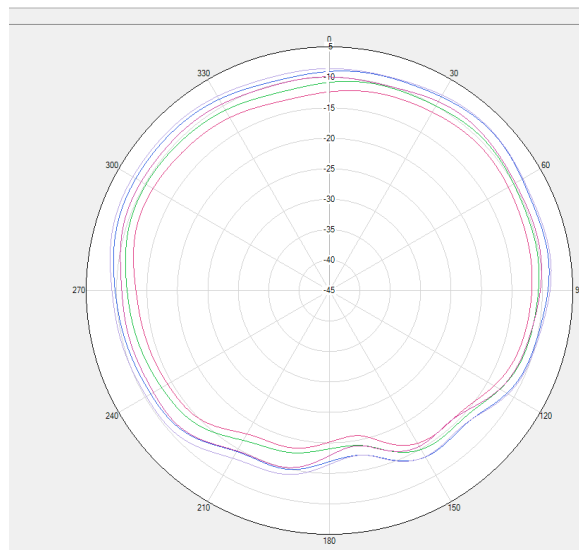
LTE B71 NR n71 $\Phi=90^\circ$



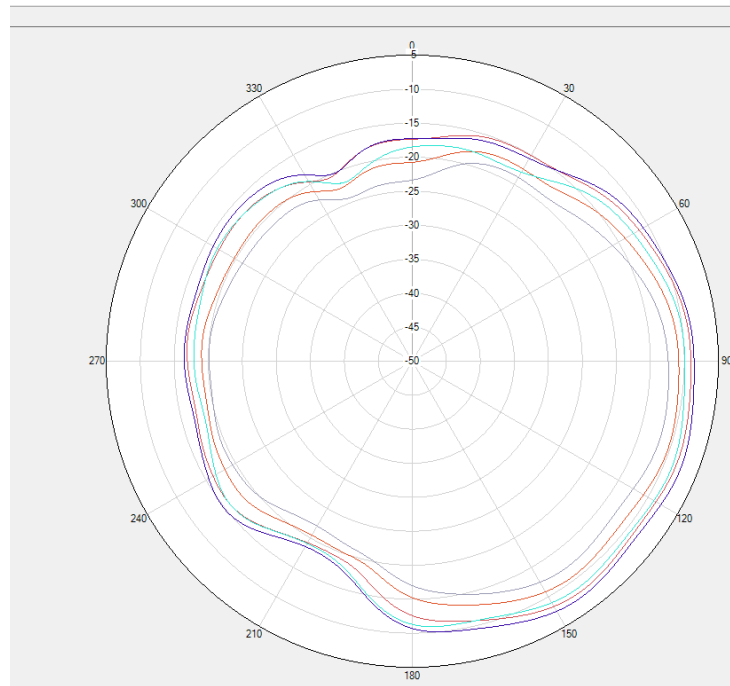
LTE B71 NR n71 Theta=90deg

※ Antenna Gain

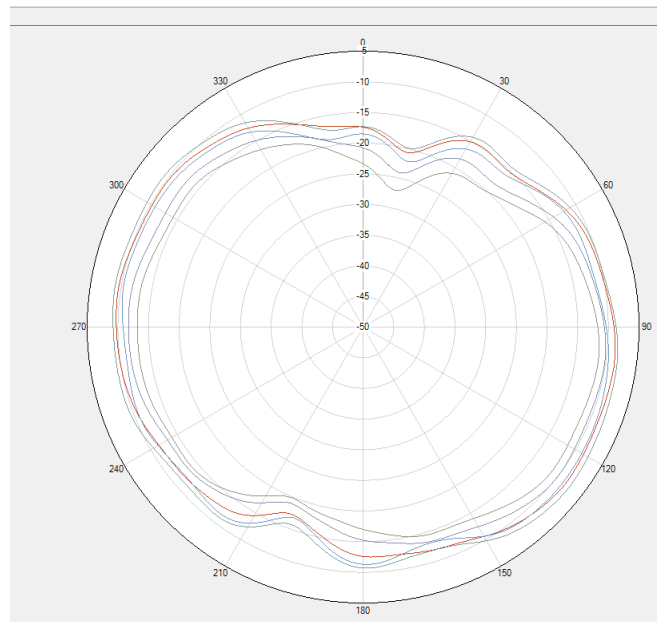
ANT3



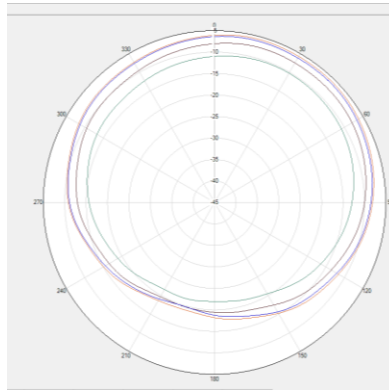
DCS /WCDMA B4/LTE B3/B4/B66 Phi=0deg



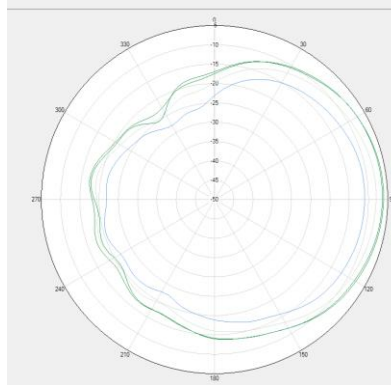
DCS /WCDMA B4/LTE B3/B4/B66 Phi=90deg



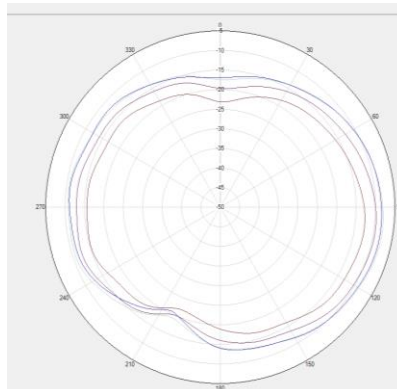
DCS /WCDMA B4/LTE B3/B4/B66 Theta=90deg



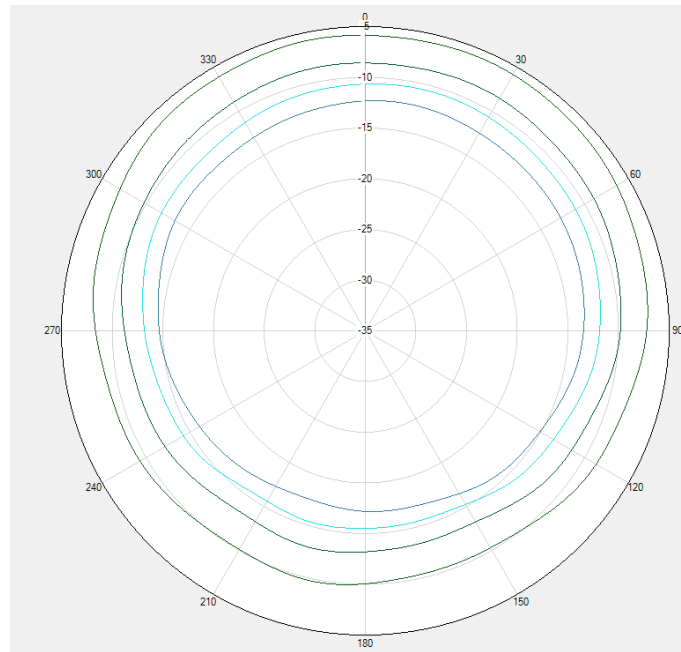
WCDMA B1 , LTE B1, NR n1 $\Phi=0^\circ$



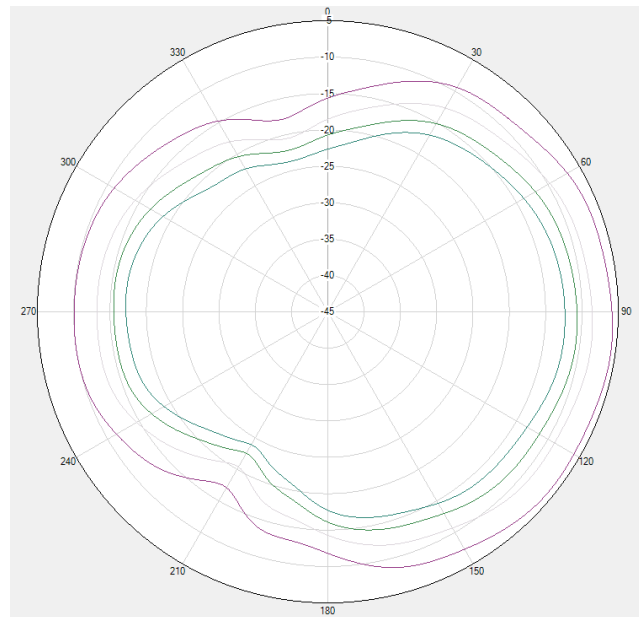
WCDMA B1 , LTE B1, NR n1 $\Phi=90^\circ$



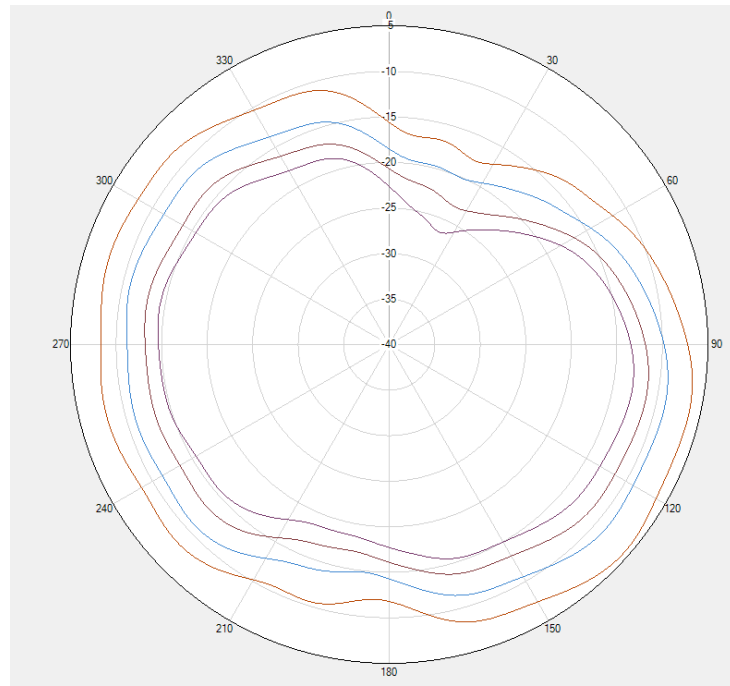
WCDMA B1 , LTE B1, NR n1 $\Theta=90^\circ$



PCS/WCDMA B2/LTE B2 $\Phi=0^\circ$



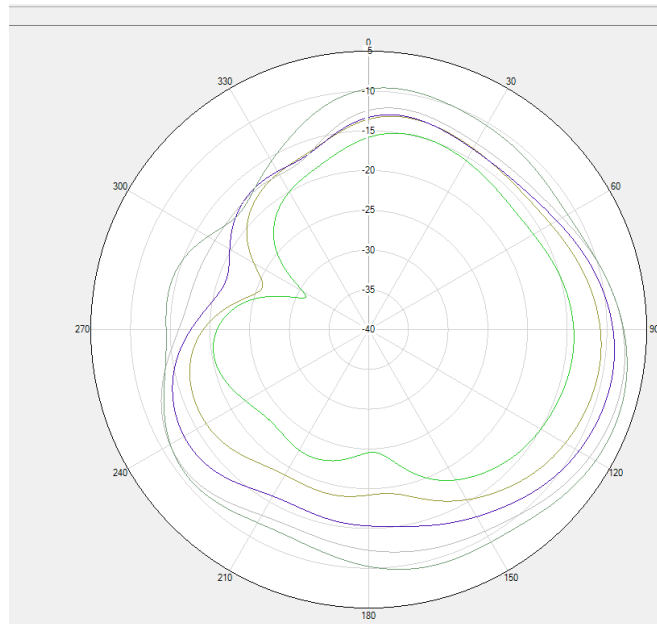
PCS/WCDMA B2/LTE B2 $\Phi=90^\circ$



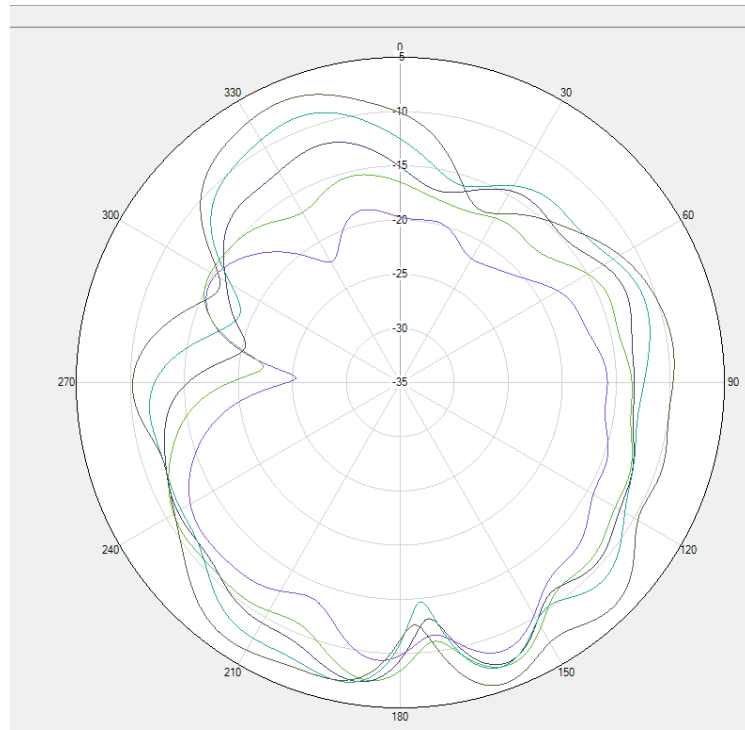
PCS/WCDMA B2/LTE B2 Theta=90deg

※ Antenna Gain

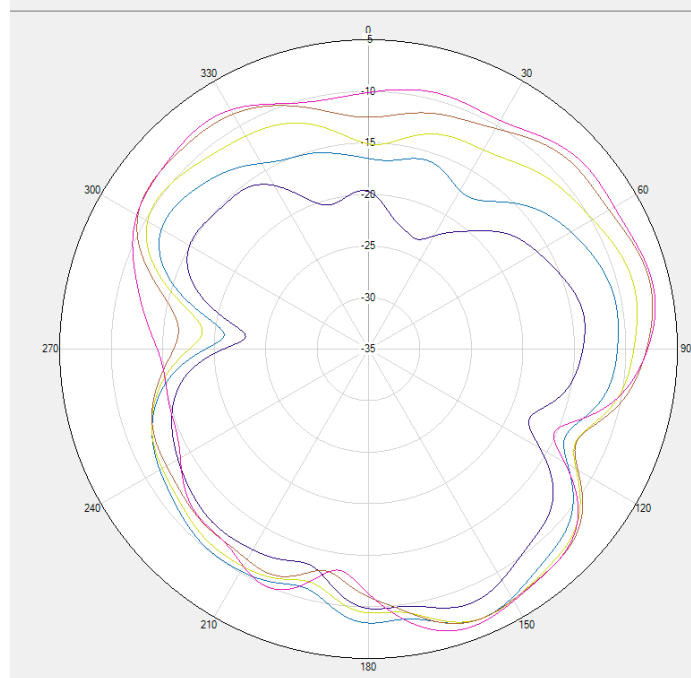
ANT5



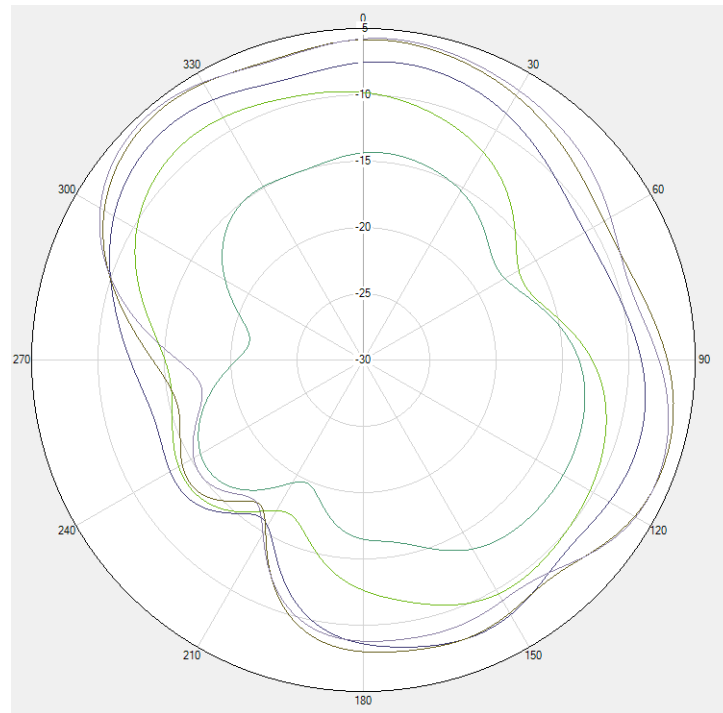
LTE DCS/PCS/WB2/B2/B3/B4/B66 NR n3/n66 Phi=0deg



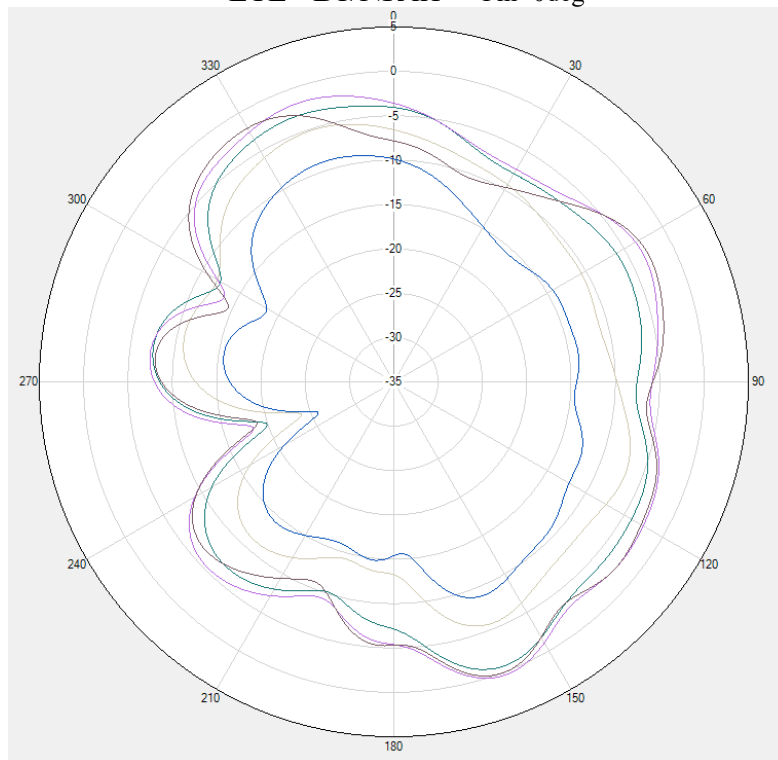
LTE DCS/PCS/WB2/B2/B3/B4/B66 NR n3/n66 Phi=90deg



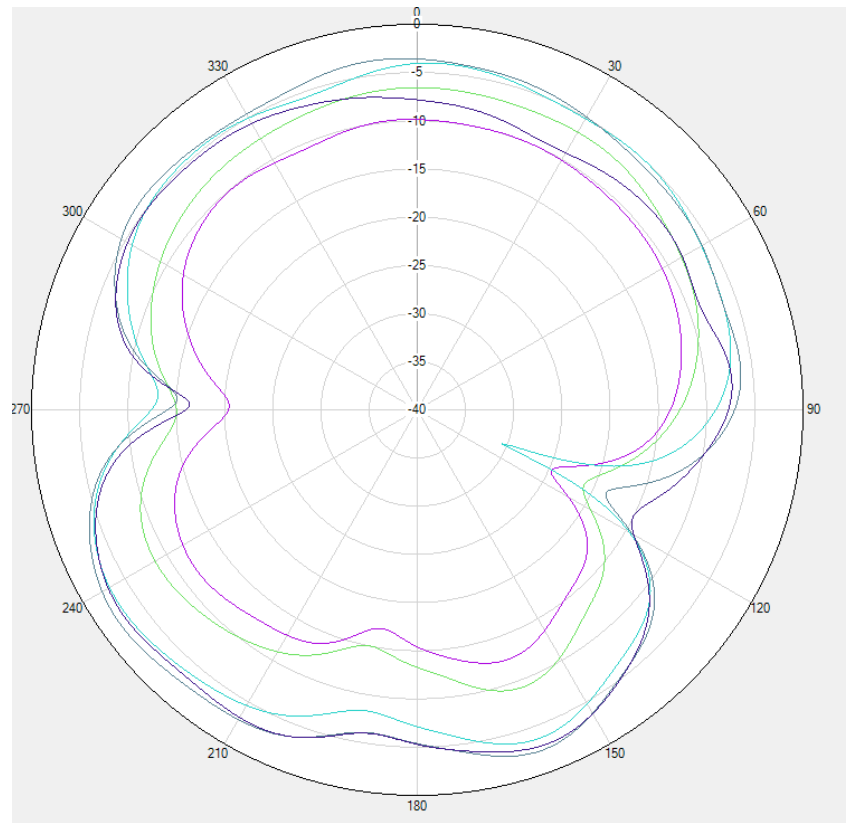
LTE DCS/PCS/WB2/B2/B3/B4/B66 NR n3/n66 Theta=90deg



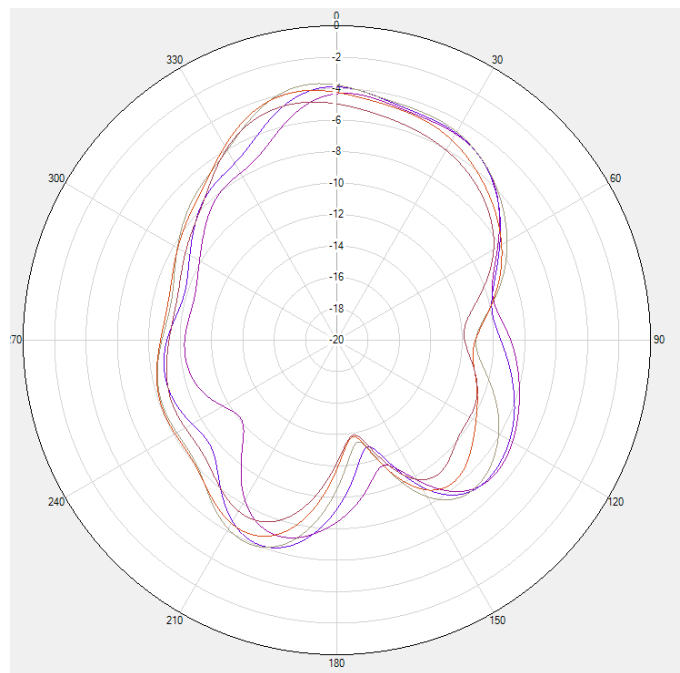
LTE B1/NR n1 Phi=0deg



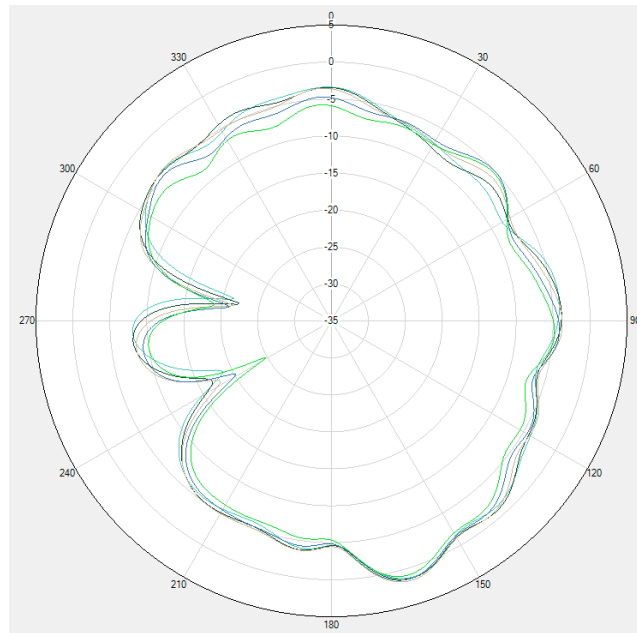
LTE B1/NR n1 Phi=90deg



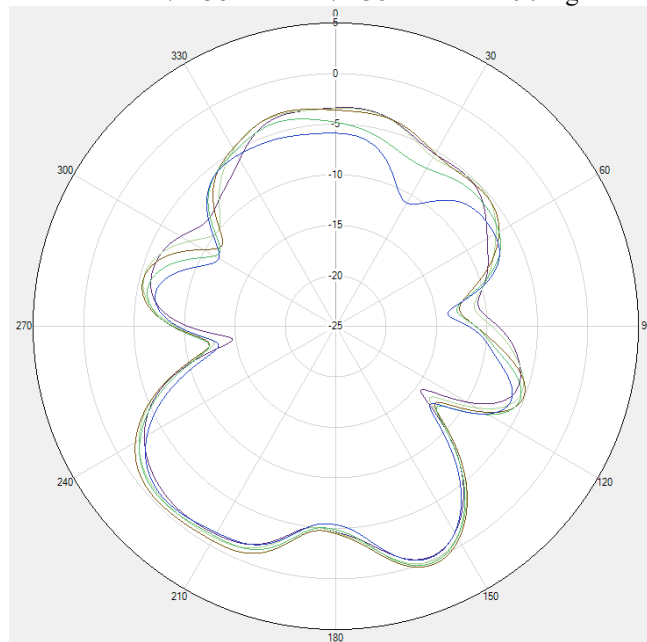
LTE B1/NR n1 Theta=90deg



LTE B7/B38/41 NR n7/n38/n41 Phi=0deg



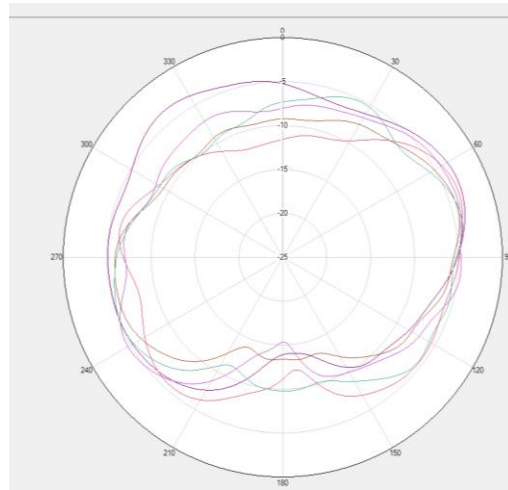
LTE B7/B38/41 NR n7/n38/n41 Phi=90deg



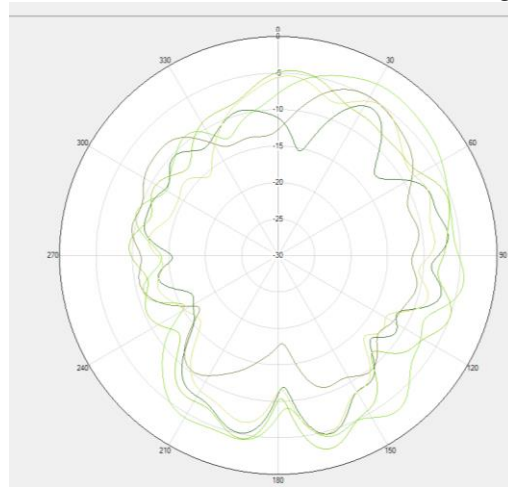
LTE B7/B38/41 NR n7/n38/n41 Theta=90deg

※ Antenna Gain

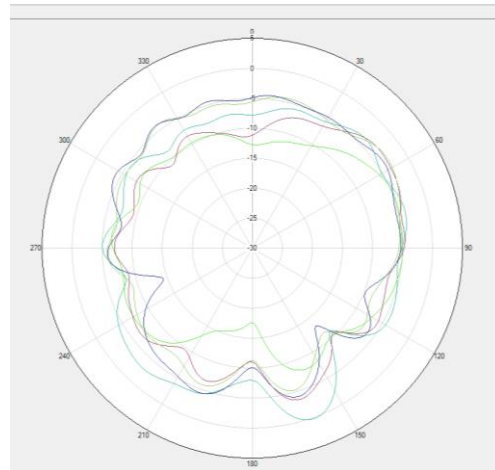
ANT6



B42/NR n77/78 Phi=0deg



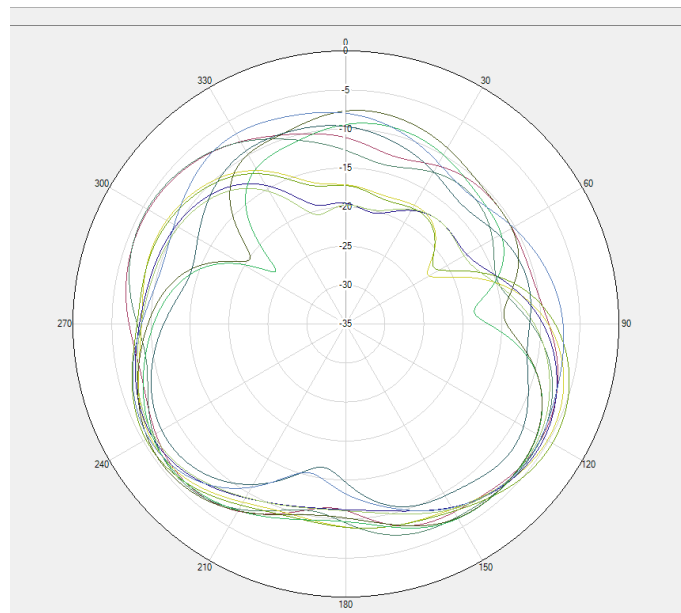
B42/NR n77/78 Phi=90deg



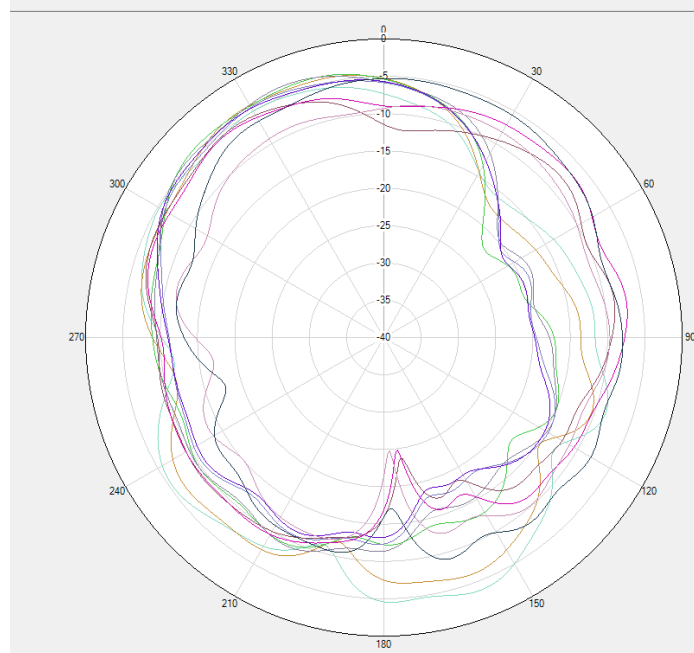
B42/NR n77/78 Theta=90deg

※ Antenna Gain

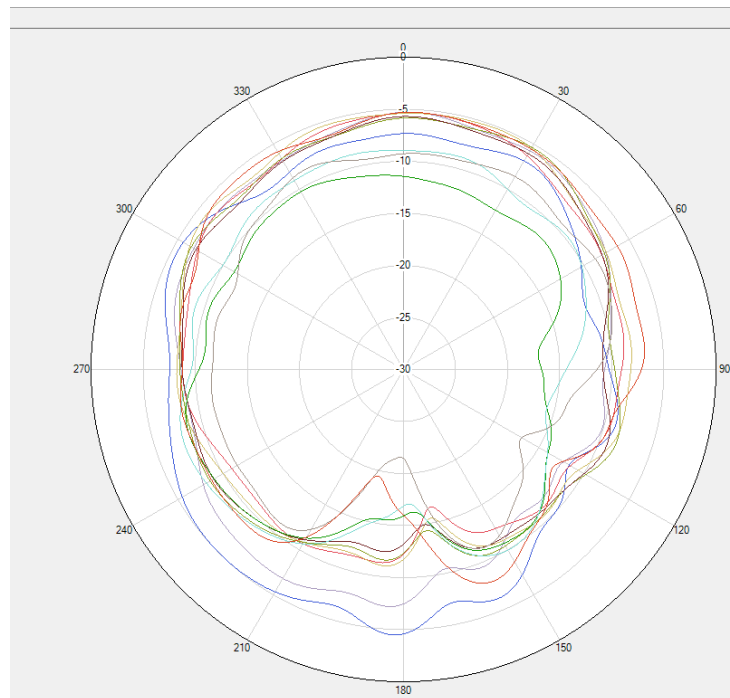
ANT8



B1/B3/B7/B38/B41 $\Phi=0^\circ$



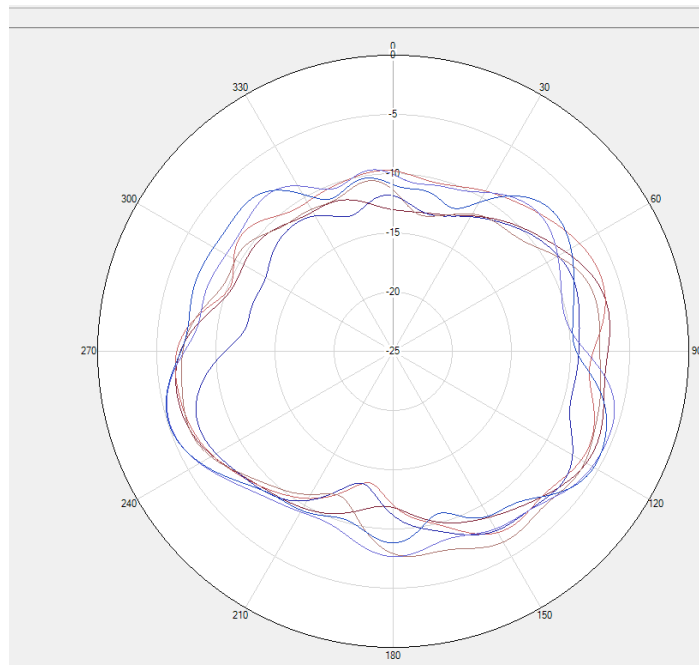
B1/B3/B7/B38/B41 $\Phi=90^\circ$



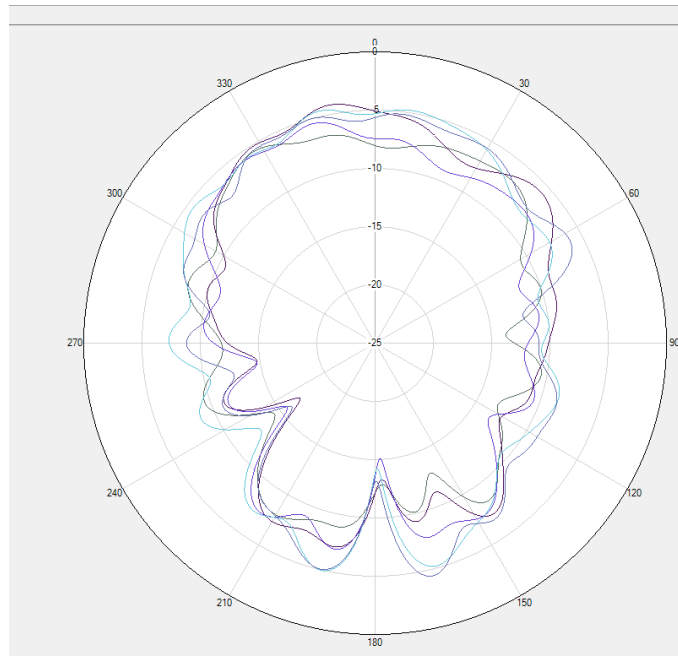
B1/B3/B7/B38/B41 Theta=90deg

※ Antenna Gain

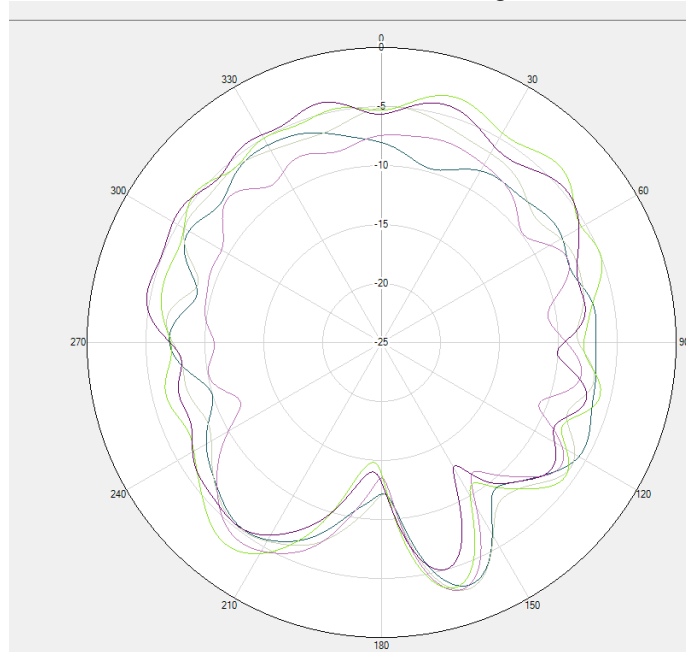
ANT7



B42/N77/N78 Phi=0deg



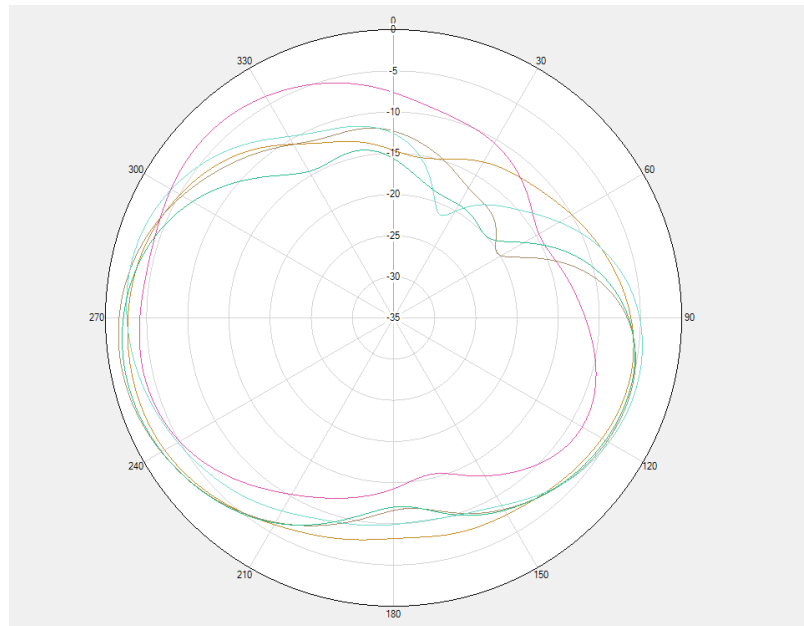
B42/N77/N78 $\Phi=90^\circ$



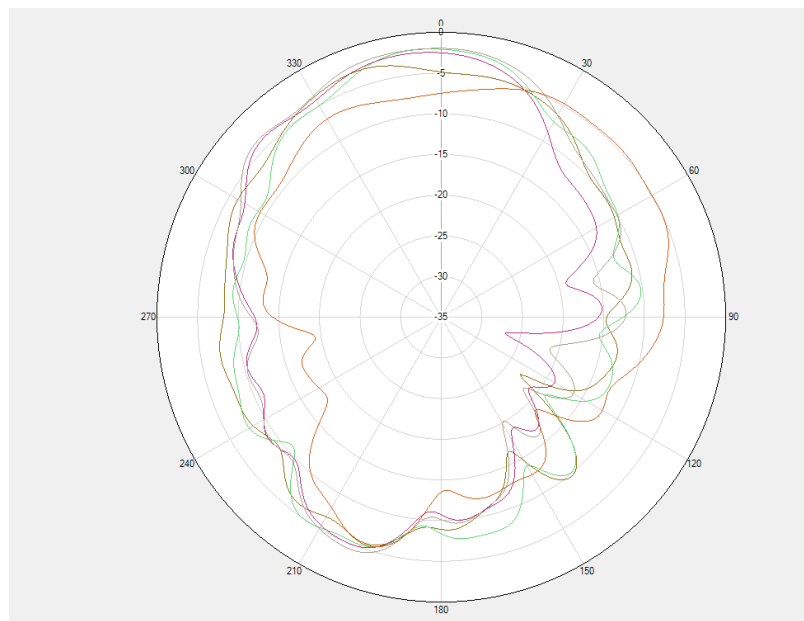
B42/N77/N78 $\Theta=90^\circ$

※ Antenna Gain

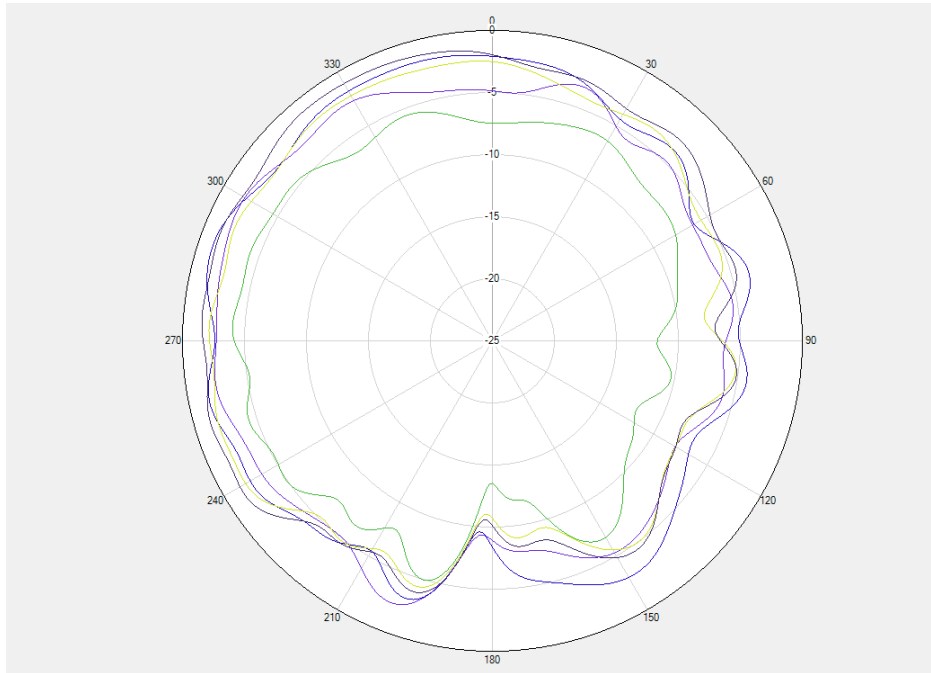
ANT9



B42/N77/N78 $\Phi = 0^\circ$



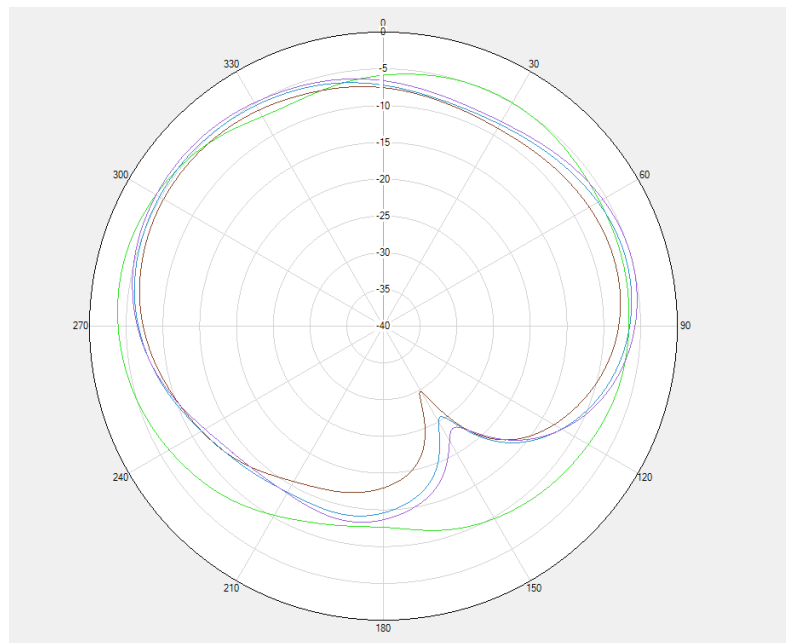
B42/N77/N78 $\Phi = 90^\circ$



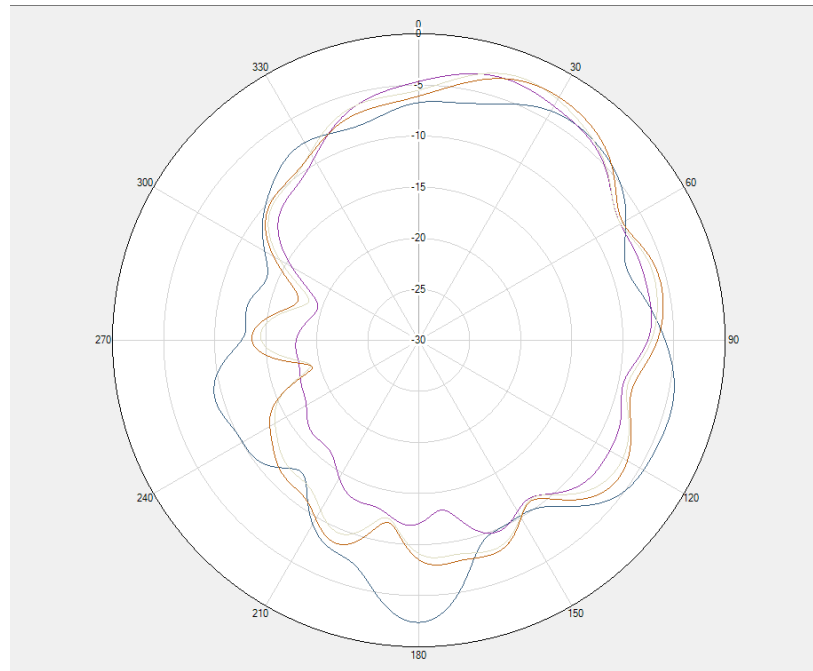
B42/N77/N78 Theta=90deg

※ Antenna Gain

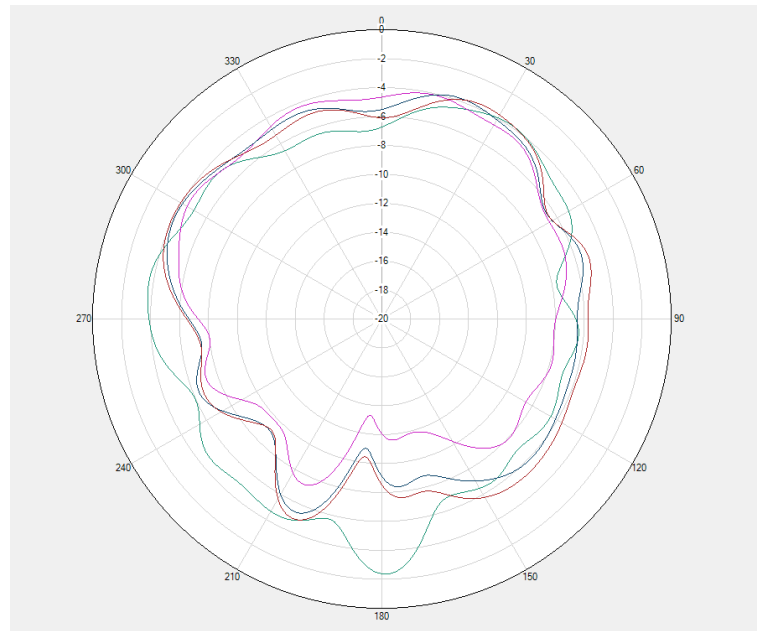
ANT12



GPS/Wifi 2.4G Phi=0deg



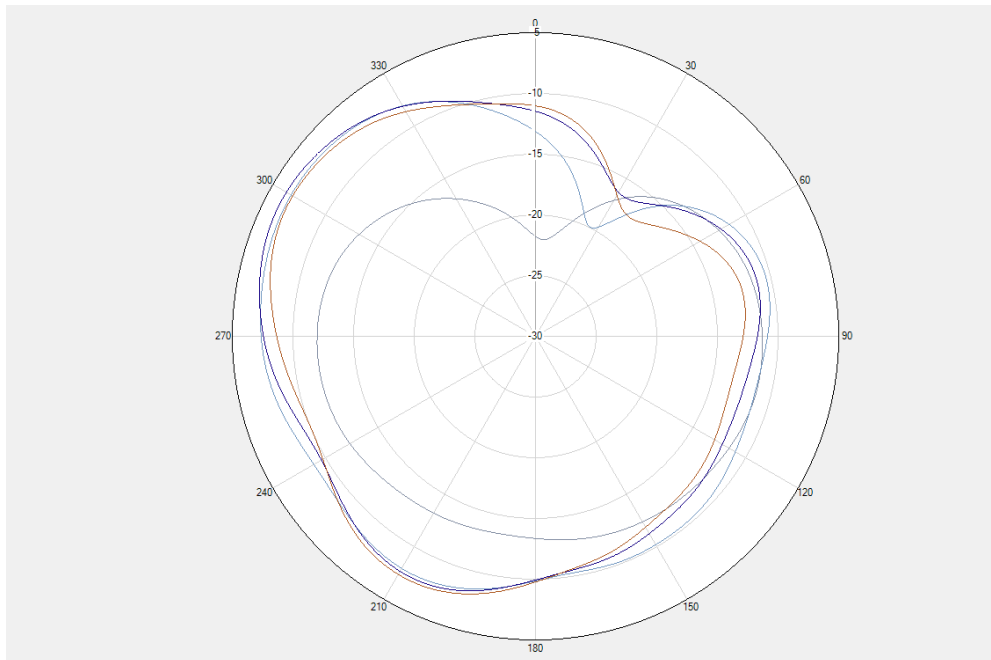
GPS/Wifi 2.4G Phi=90deg



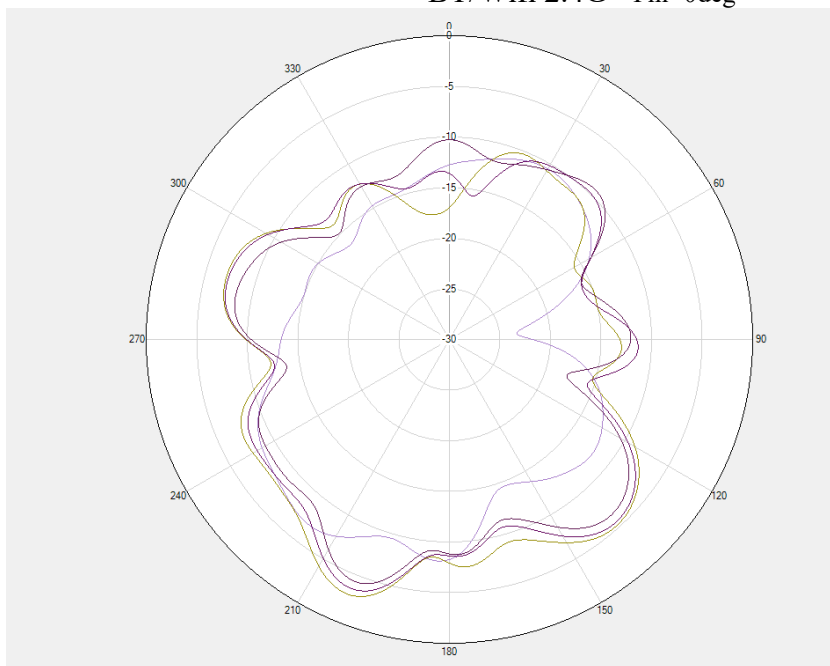
GPS/Wifi 2.4G Theta=90deg

※ Antenna Gain

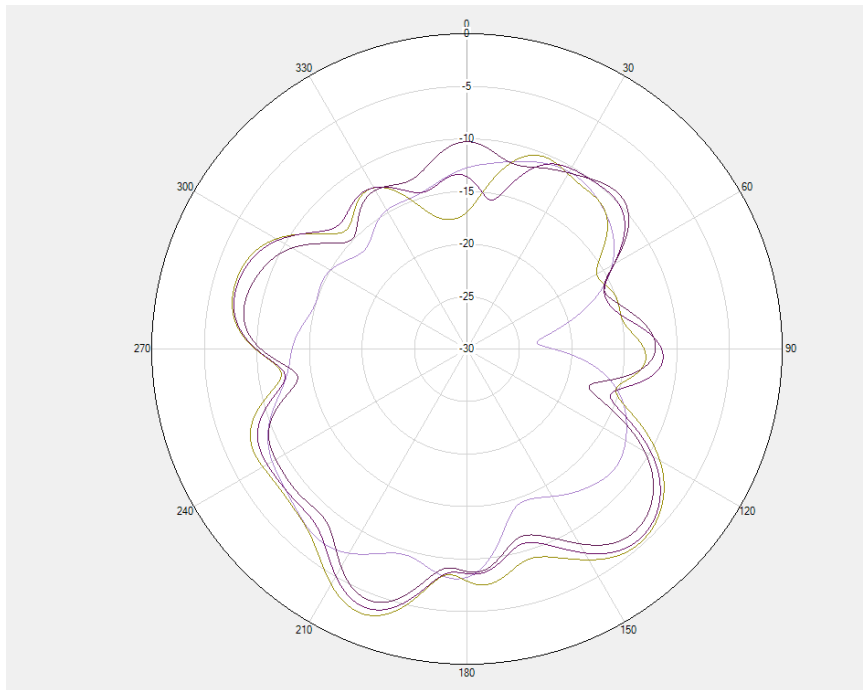
ANT14



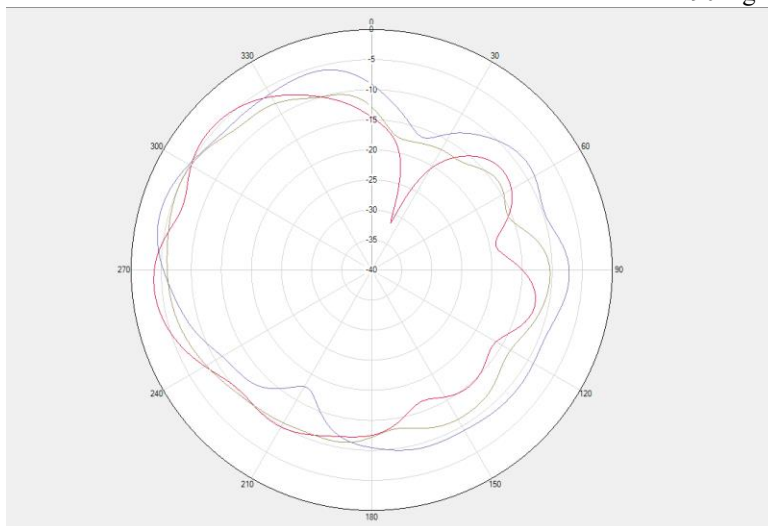
BT/Wifi 2.4G $\Phi=0^\circ$



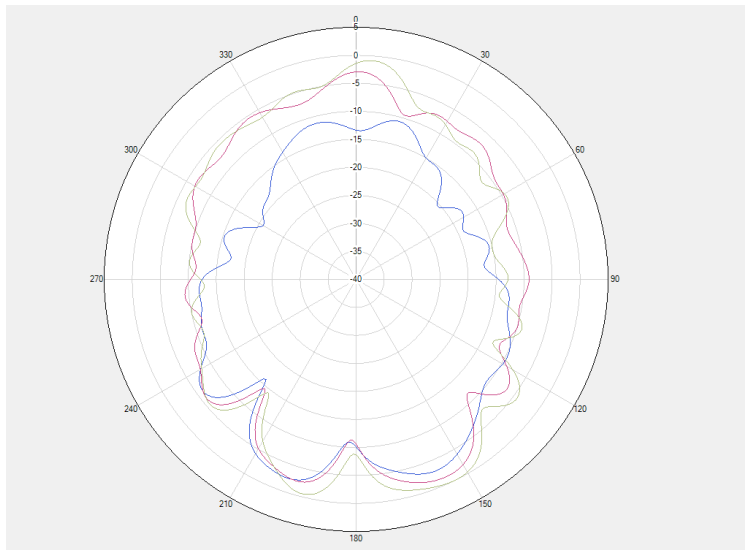
BT/Wifi 2.4G $\Phi=90^\circ$



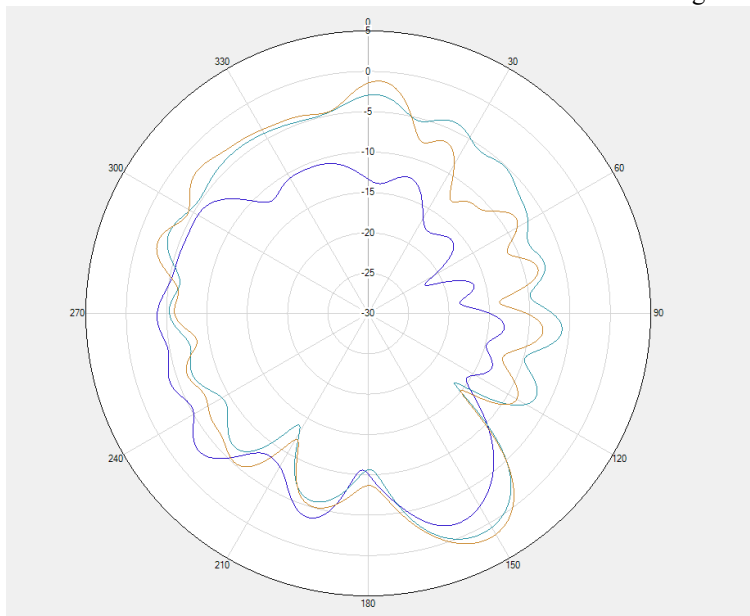
BT/Wifi 2.4G $\Theta=90\text{deg}$



Wifi 5G $\Phi=0\text{deg}$



Wifi 5G Phi=90deg



Wifi 5G Theta=90deg

PREPARED BY	CHECKEDBY	APPROVAL BY	S.R.NO	
			DATE:	2023/02/05