



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/B40/B41/B42/B66

NR Mode N1/N3/N5/N7/N8/N12/N20/N28/N38/N40/N41/N66/N77/N78

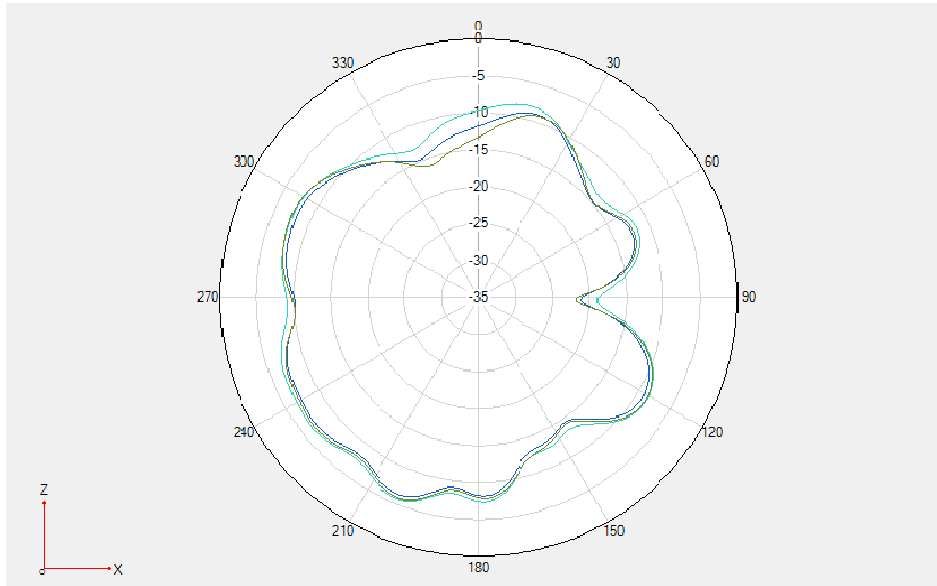
Name and address of the antenna manufacturer	Model number of the antenna
Shangyuan Technology (China) Co,Ltd.Company Address: 1/F, Building 4, No. 99, Lane 215, Gaoguang Road, Qingpu District, Shanghai	SY-CL9-ANT0 SY-CL9-ANT1 SY-CL9-ANT2 SY-CL9-ANT3 SY-CL9-ANT4 SY-CL9-ANT5 SY-CL9-ANT6 SY-CL9-ANT7 SY-CL9-ANT8 SY-CL9-ANT12 SY-CL9-ANT13 SY-CL9-ANT14 SY-CL9-ANT15

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 B40 NR n40:2300-2400MHz
	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	
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 NR n3: 1805–1880 MHz
	WCDMA 4/LTE B4/B66 NR n66: 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 B40 NR n40:2300-2400MHz
	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	

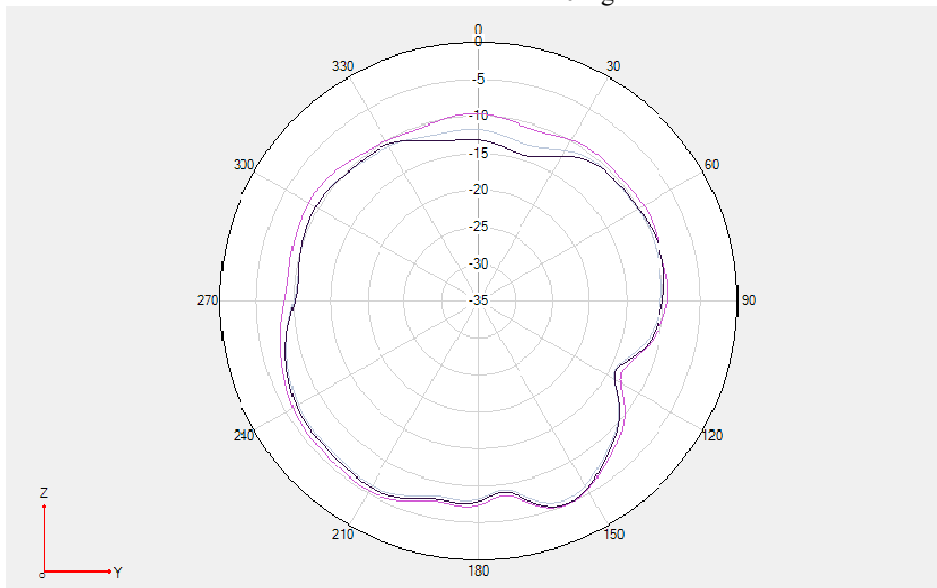
Antenna Average Gain	ANT0(MB DRX MIMO&N77/78 DRX MIMO)	LTE B1/B3/B4/B66 NR n1/3/66: -9.5dbi
		LTE B42, NR77/78:-8.5dbi
	ANT1(LB TRX)	LTE B12/B17/B28 NR n12/n28:-9.8dbi
		LTE B20 NR n20:-8.1dbi
		GSM 850, WCDMA B5, LTE B5 NR n5:-8.3dbi
		GSM900, WCDMA B8, LTE B8 NR n8:-7.8dbi
	ANT2(MHB PRX)	WCDMA B1 , LTE B1, NR n1:-6.6dbi
		DCS, LTE B3/4/66, NR n3/66:-6.2dbi
		PCS/WCDMA B2/LTE B2 :-6.5dbi
		LTE B40, NR n40:-5.1dbi
	ANT3(PRX MIMO)	LTE B7/B38/B41,NR n7/38/41:-5.2dbi
		LTE B42, NR77/78:-8.3dbi
	ANT4(LB DRX)	LTE B12/B17/B28 NR n12/n28:-7dbi
		LTE B20 NR n20:-7.2dbi
		GSM 850, WCDMA B5, LTE B5 NR n5: -7.4dbi
		GSM900, WCDMA B8, LTE B8 NR n8:-7.8dbi
	ANT5(MHB DRX)	WCDMA B1 , LTE B1, NR n1:-8.8dbi
		DCS, LTE B3/4/66, NR n3/66:-8.2dbi
		PCS/WCDMA B2/LTE B2 :-10dbi
		LTE B40, NR n40:-7.8dbi
	ANT6(ENDC TRX)	LTE B7/B38/B41,NR n7/38/41:-7.2dbi
		LTE B1, NR n1:-6.7dbi
		LTE B3/4/66, NR n3/66:-7.2dbi
		LTE B40, NR n40:-7.7dbi
	ANT7(PRX)	LTE B7/B38/B41,NR n7/38/41:-8.3dbi
		LTE B42, NR77/78:-5.8dbi
ANT8(N77/78 DRX&WIFI2.4G MIMO1)	LTE B42, NR77/78:-9dbi	
	BT, WIFI 2.4G MIMO1:-8.6dbi	
ANT12	GPS L1:-5.8dbi	
ANT13	GPS L5:-9dbi	
	WIFI 2.4G MIMO2:-7.2dbi	
ANT14	WIFI 5G MIMO1:-6.5dbi	
ANT15	WIFI 5G MIMO2:-4.6dbi	

※ Antenna Gain

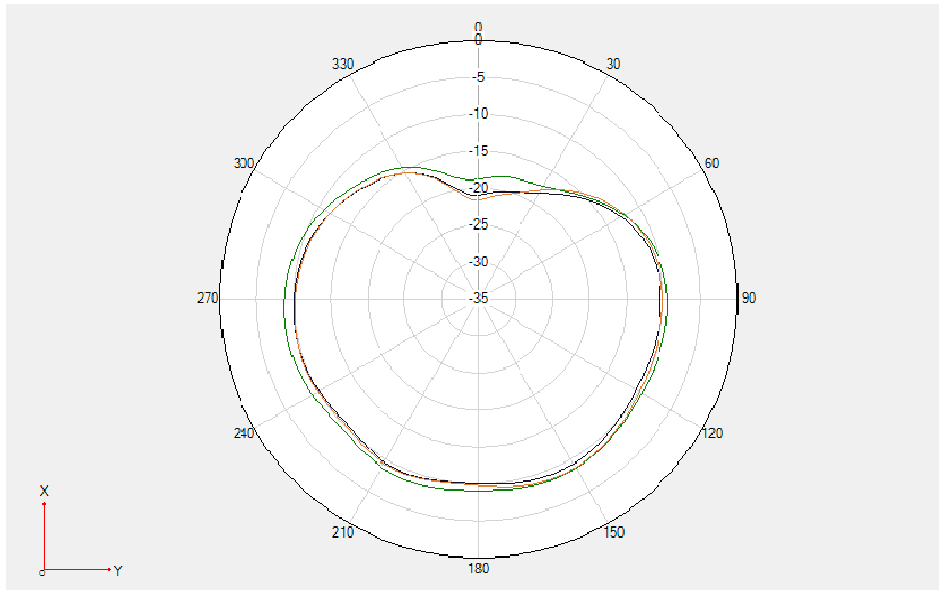
ANT0



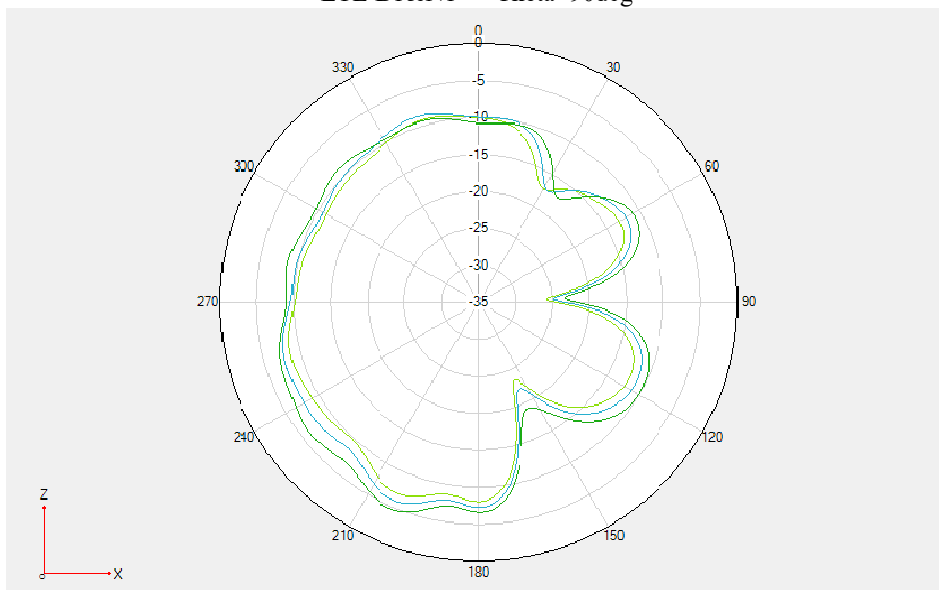
LTE B1&N1 $\Phi=0\text{deg}$



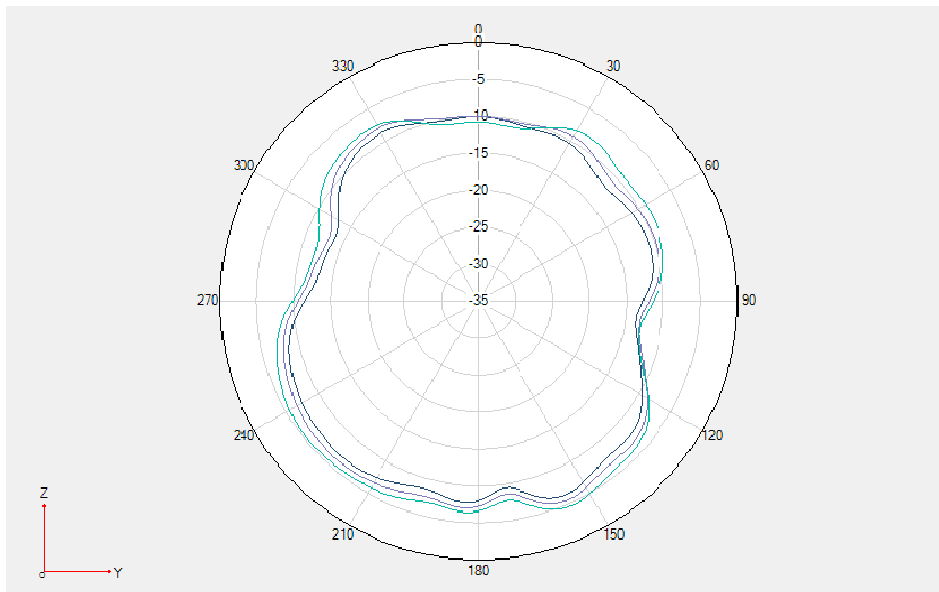
LTE B1&N1 $\Phi=90\text{deg}$



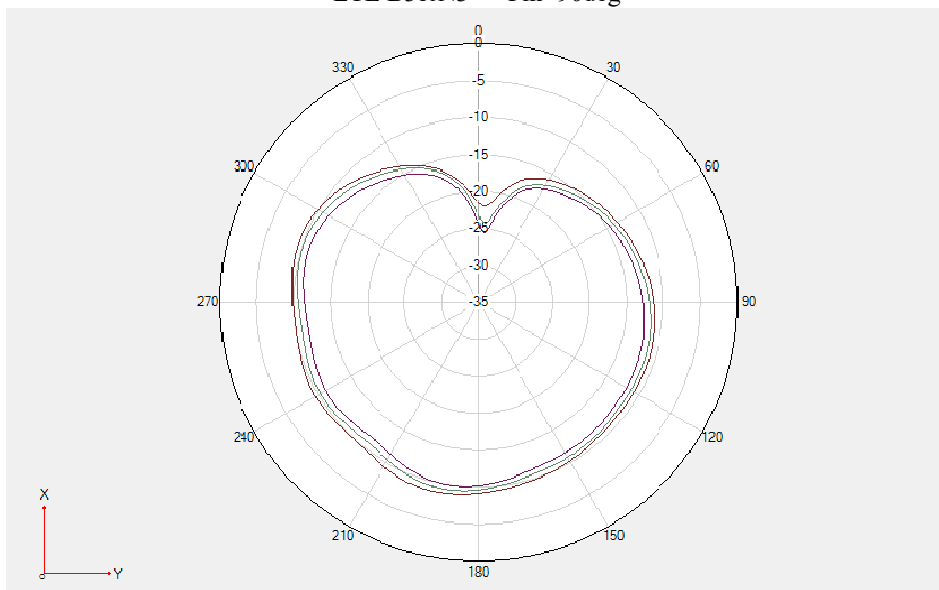
LTE B1&N1 Theta=90deg



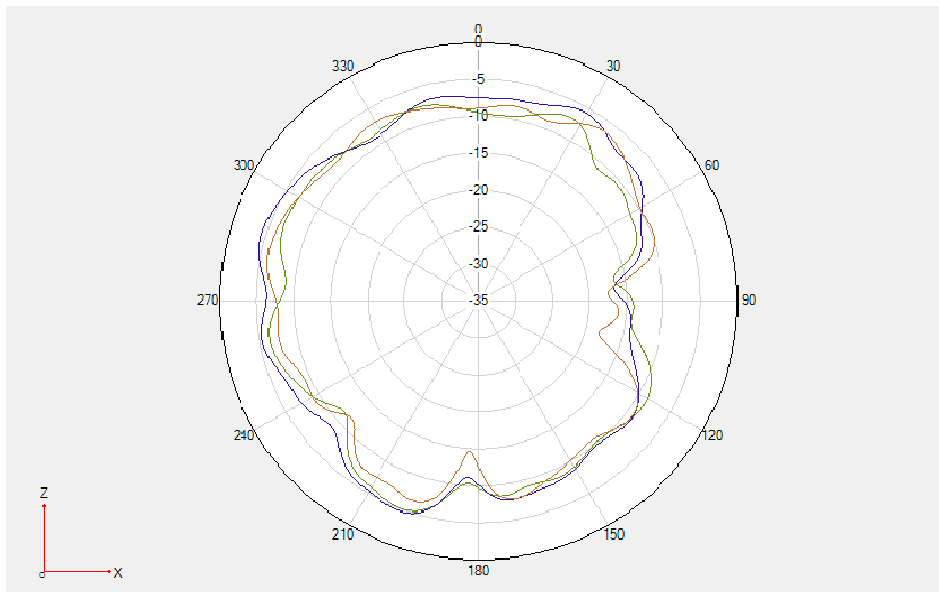
LTE B3&N3 Phi=0deg



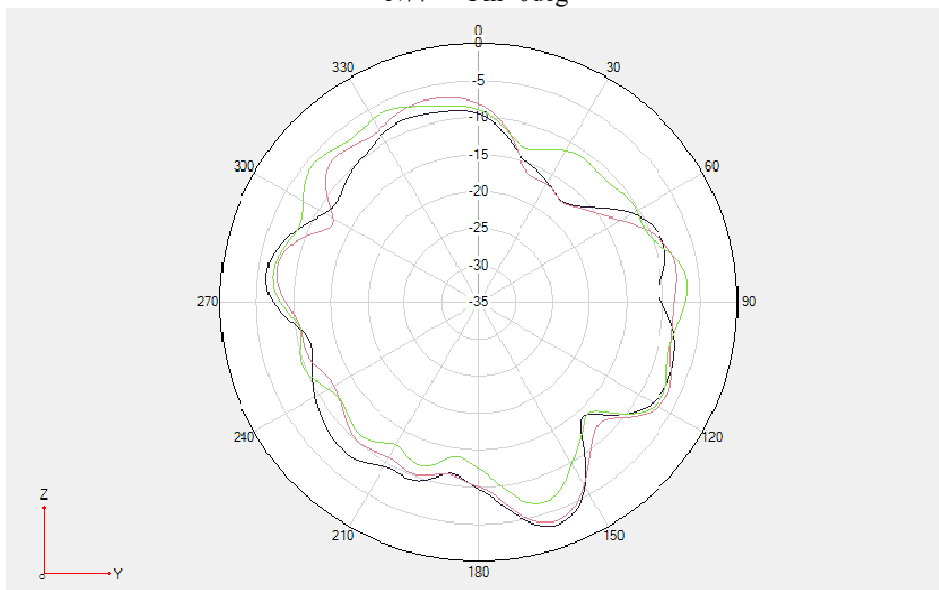
LTE B3&N3 $\Phi=90^\circ$



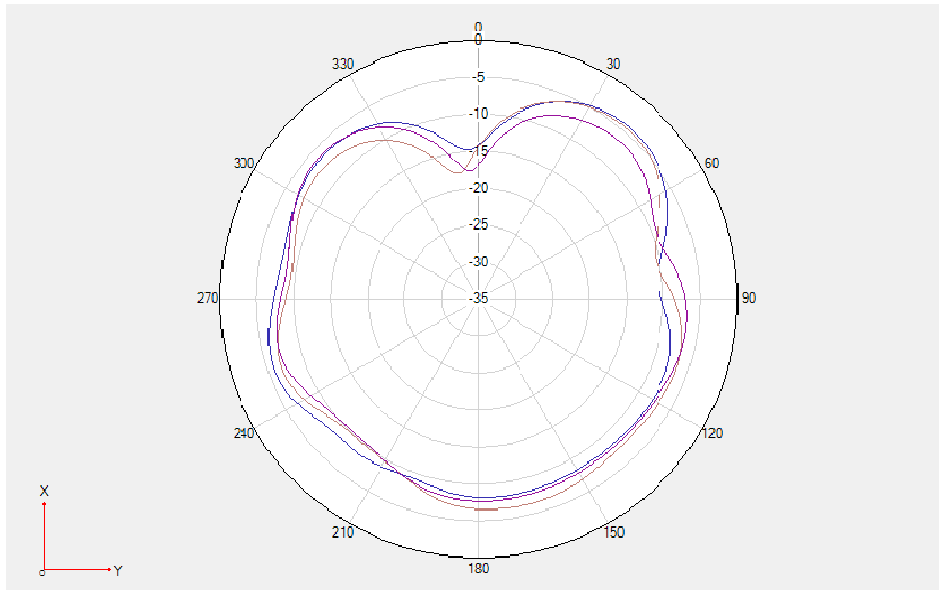
LTE B3&N3 $\Theta=90^\circ$



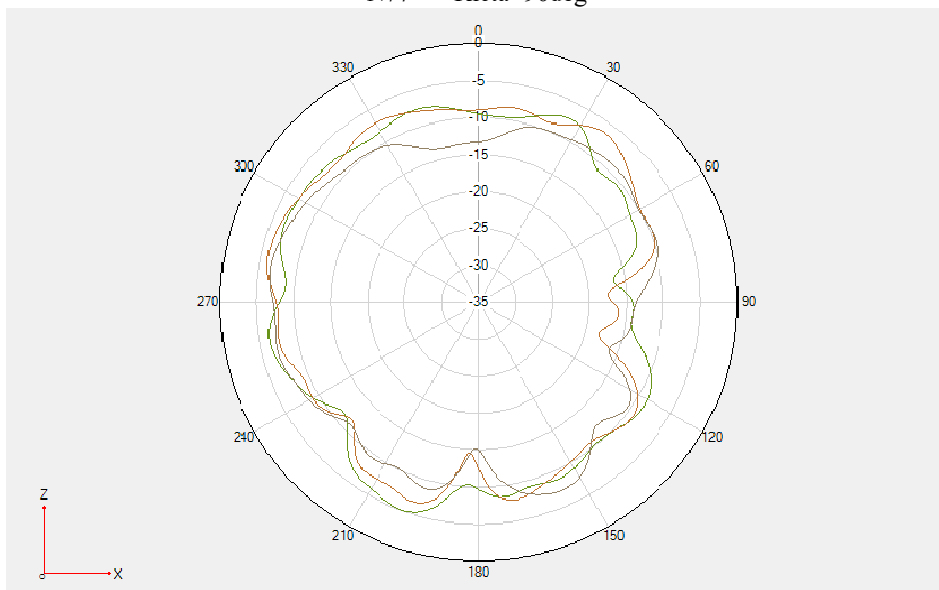
N77 $\Phi=0^\circ$



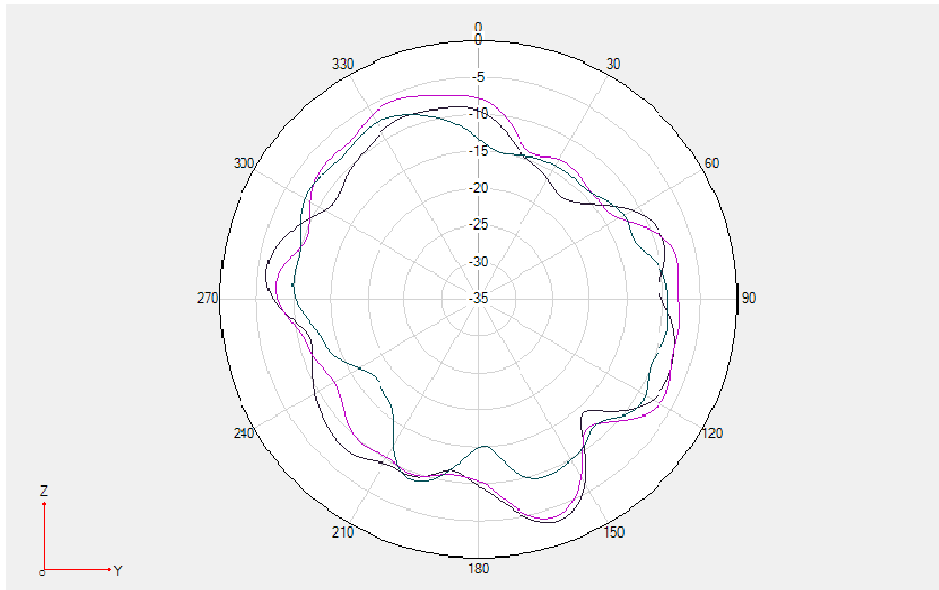
N77 $\Phi=90^\circ$



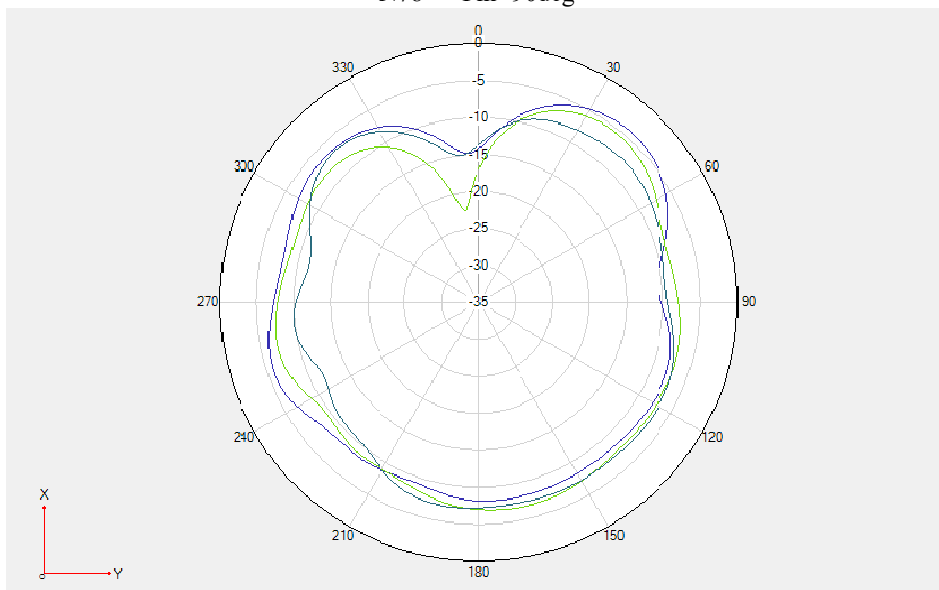
N77 $\Theta = 90^\circ$



N78 $\Phi = 0^\circ$



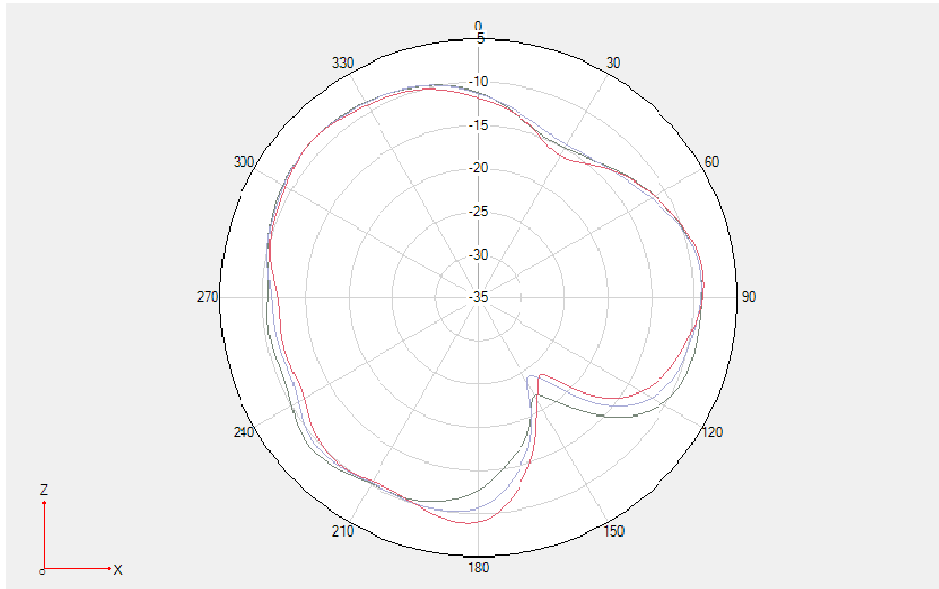
N78 $\Phi = 90^\circ$



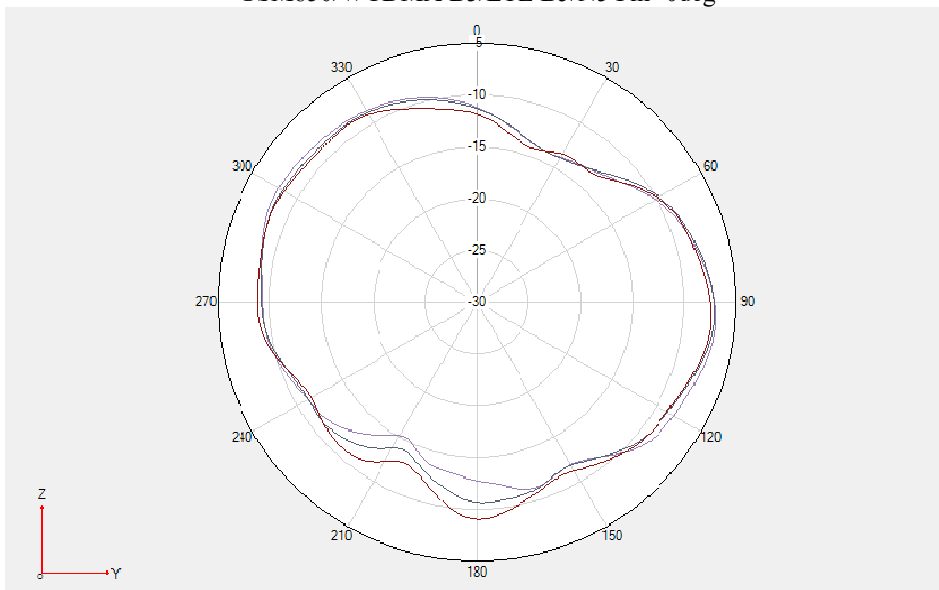
N78 $\Theta = 90^\circ$

※ Antenna Gain

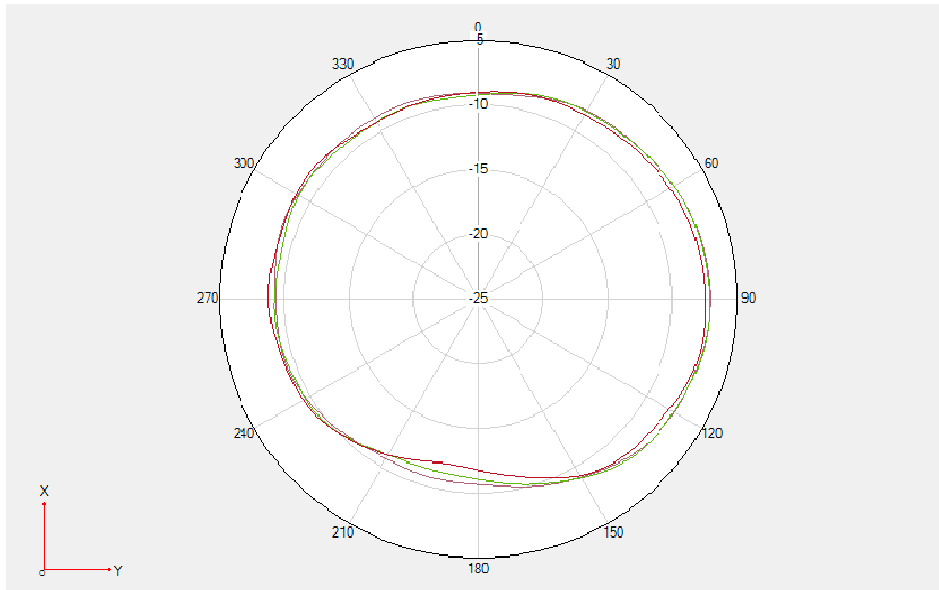
ANT1



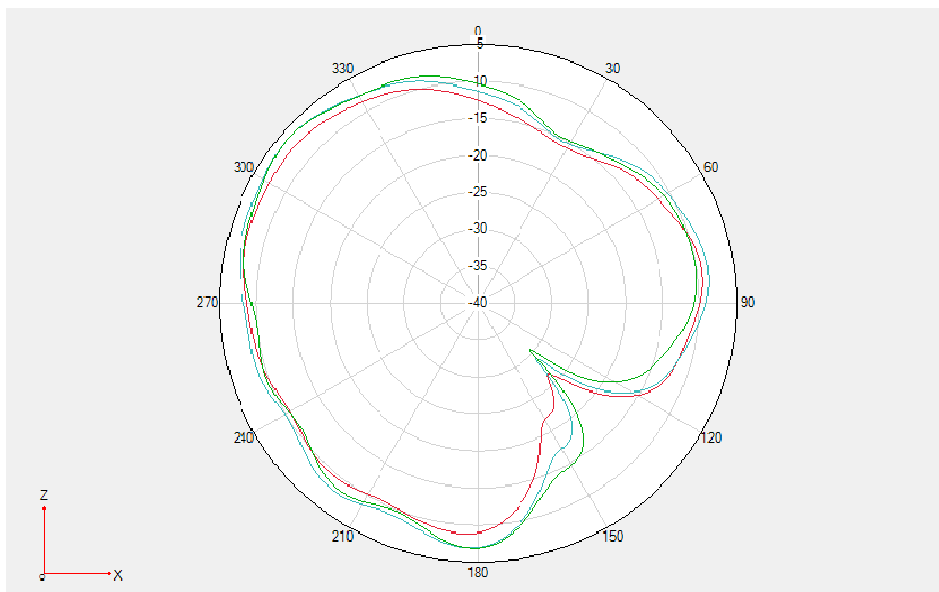
GSM850/WCDMA B5/LTE B5/N5 $\Phi=0^\circ$



GSM850/WCDMA B5/LTE B5/N5 $\Phi=90^\circ$



GSM850/WCDMA B5/LTE B5/N5 Theta=90deg



GSM900/WCDMA B8/LTE B8/N8 Phi=0deg