

Feature

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

Application

- ※ GSM 850/900/DCS/PCS
 - ※ WCDMA B1/B2/B4/B5/B8
 - ※ LTE B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28/B38/B40/B41/B66
 - ※ NR N1/N3/N5/N7/N8/N12/N20/N28/N38/N40/N41/N77/N78
 - ※ Bluetooth
 - ※ WIFI 802.11b/g/n
 - ※ GPS L1/L5
- communication applications

Name and address of the antenna manufacturer	Model number of the antenna
名称：浙江海通通讯电子股份有限公司， 地址：上海市浦东新区秀浦路 2555 号 C5 栋 1 楼 Name: Zhejiang Haitong Communication Electronics Co., Ltd. Address: 1 floor, C5 building, 2555 Xiu Pu Road, Pudong New Area, Shanghai.	CK9N-LDS-V0.3

TYPE	Band & Frequency
Transmitter Frequency	GSM 850/WCDMA B5/LTE B5:824-849MHz
	GSM 900/WCDMA B8/LTE B8:880-915MHz
	DCS/LTE B3:1710-1785MHz
	PCS/WCDMA B2/LTE B2:1850-1910MHz
	WCDMA B1/LTE B1:1920-1980MHz
	WCDMA B4/LTE B4:1710-1755MHz
	LTE B7:2500-2690MHz
	LTE BAND12: 699-716MHz
	LTE BAND17: 704-716MHz
	LTE B20:832-862MHz
	LTE B28:703-748MHz
	LTE B66:1710-1780MHz
	LTE B38:2570-2620MHz
	LTE B40:2300-2400MHz
	LTE B41:2535-2655MHz
	NR N1:1920-1980MHz
	NR N3:1710-1785MHz
	NR N5:824-849MHz
	NR N7:2500-2690MHz
	NR N8:880-960MHz
	NR N12:699-716MHz
	NR N20:832-862MHz
	NR N28:703-748MHz
	NR N38:2570-2620MHz
NR N40:2300-2400 MHz	
NR N41:2535-2655 MHz	
NR N77:3300-4200MHz	
NR N78:3300-3800MHz	
Receiver Frequency	GSM 850/WCDMA B5/LTE B5:869-894MHz
	GSM 900/WCDMA B8/LTE B8:925-960MHz
	DCS/LTE B3:1805-1880MHz
	PCS/WCDMA B2/LTE B2:1930-1990MHz
	WCDMA B1/LTE B1:2110-2170MHz

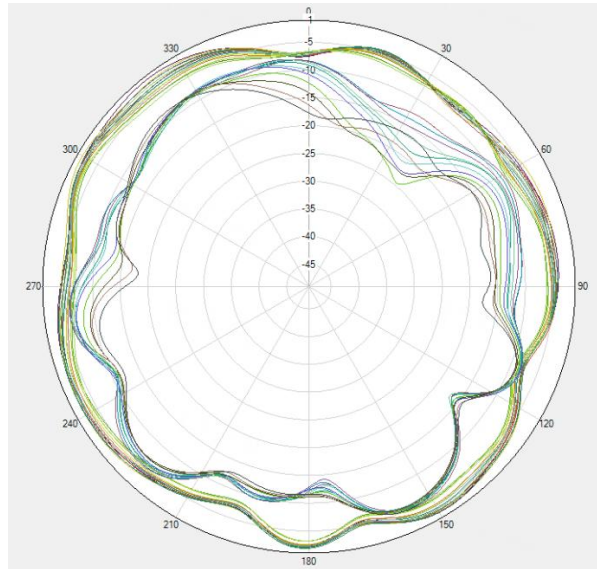
	WCDMA B4/LTE B4:2110-2155MHz
	LTE B7:2620-2690MHz
	LTE B12:729-746MHz
	LTE B17:734-746MHz
	LTE B20:791-821MHz
	LTE B28:758-803MHz
	LTE B66:2110-2180MHz
	LTE B38:2570-2620MHz
	LTE B40:2300-2400MHz
	LTE B41:2535-2655MHz
	NR N1:2110-2170MHz
	NR N3:1805-1880MHz
	NR N5:869-894MHz
	NR N7:2620-2690MHz
	NR N8:925-960MHz
	NR N12:729-746MHz
	NR N20:791-821MHz
	NR N28:758-803MHz
	NR N38:2570-2620MHz
	NR N40:2300-2400 MHz
	NR N41:2535-2655 MHz
	NR N77:3300-4200MHz
	NR N78:3300-3800MHz
RF-Output Power (E.I.R.P)	GSM850/900: 33+/-2dBm
	DCS/PCS: 30+/-2dBm
	LTE B1/B2/B3/B4/B5/B7/B8/B12/B17/B20/B28/B38/B40/B41/B66: 23+/-2.7dBm
	WCDMA B1/B2/B4/B5/B8: 24+1/-3dBm
	NR N1/N3/N5/N7/N8/N12/N20/N28/N38/N40: 23+/-2.7dBm
	N41/N77/N78: 26+/-2.7dBm
GPS L1&BT&WIFI 2.4G MIMO Antenna (Peak Gain)	GPS: 0.28
	BT&WIFI 2.4G: -3.65
WIFI 5G MIMO Antenna (Peak Gain)	WIFI 5G: -0.91
N1/N3 DRX&N77/N78 PRX Antenna (Peak Gain)	N1: -0.95
	N3: -4.2
	N77: 2.1
	N78: 2.74
WIFI 2.4G&WIFI 5G Antenna (Peak Gain)	WIFI 2.4G: 2.01
	WIFI 5G: 1.7

LB PRX Antenna (Peak Gain)	GSM 850/WCDMA B5/LTE B5/NR N5: -6.84
	GSM 900/WCDMA B8/LTE B8/NR N8: -7.0
	LTE B12: -5.4
	LTE B17: -5.4
	LTE B20: -6.84
	LTE B28: -5.7
MHB DRX Antenna (Peak Gain)	DCS/LTE B3/NR N3:-3.3
	PCS/WCDMA B2/LTE B2: -2.4
	WCDMA B1/LTE B1/NR N1: -1.5
	WCDMA B4/LTE B4: -1.5
	LTE B7/B38/B41/NR N41: -0.4
	LTE B40/NR N40: -1.4
N77/N78 DRX(LDS) Antenna (Peak Gain)	N77: 0.6
	N78: 0.6
LB DRX&B7/B38/B40/B41 Antenna (Peak Gain)	GSM 850/WCDMA B5/LTE B5/NR N5: -4.8
	GSM 900/WCDMA B8/LTE B8/NR N8: -5.2
	LTE B12/NR N12: -3.1
	LTE B17: -3.1
	LTE B20/NR N20: -2.3
	LTE B28/NR N28: -2.3
	B7: 0.1
	LTE B38/NR N39: 0.1
	LTE B40/NR N40: -0.1
	LTE B41/NR N41: 0.1
N1/N3/N7/N38/N40/N41 PRX&N77/N78 DRX Antenna (Peak Gain)	N1: -1.38
	N3: -1.75
	N7: 1.2
	N38: 1.2
	N40: 0.7
	N41: 1.2
	N77: 0.5
	N78: 0.5
MHB PRX Antenna (Peak Gain)	DCS/LTE B3/NR N3: -0.5
	PCS/WCDMA B2/LTE B2: -0.3
	WCDMA B1/LTE B1/NR N1: -0.3
	WCDMA B4/LTE B4: -0.5
	LTE B7/B38/B41&NR N7/38/41: -0.12
	LTE B40&NR N40: 0.3
	LTE B66/NR N66: -0.5
N77/N78 PRX	N77: -2.96

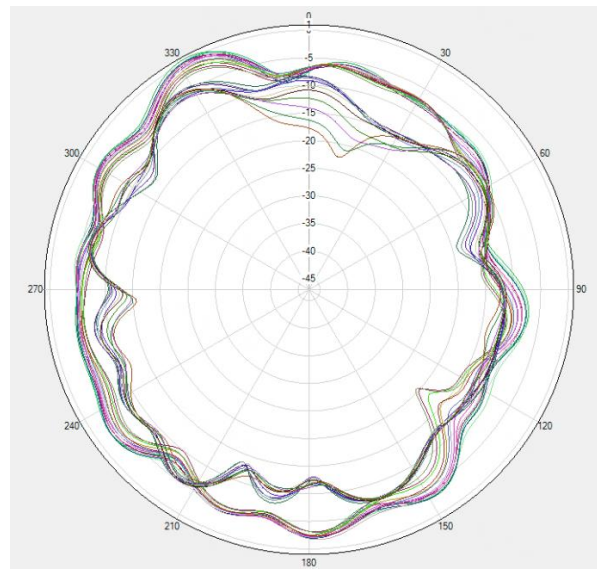
MIMO(LDS) (Peak Gain)	N78: -2.88
GPS L5 Antenna (Peak Gain)	GPS L5: -5.92
Type of Modulation	

※ Antenna Gain

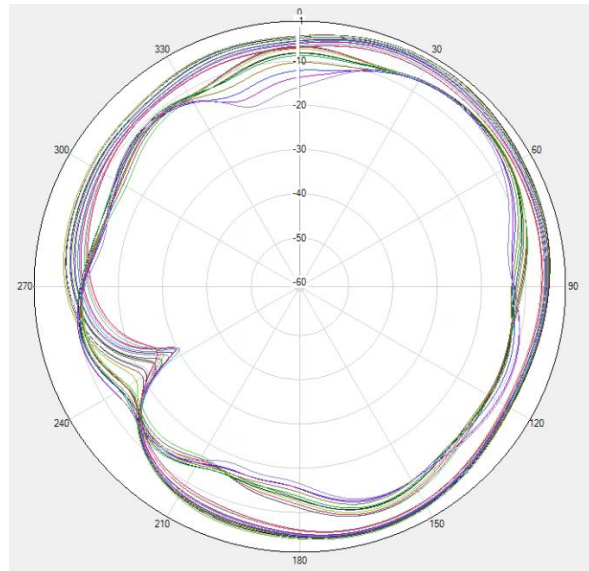
GPS L1&BT&WIFI 2.4G MIMO Antenna



Phi=0deg



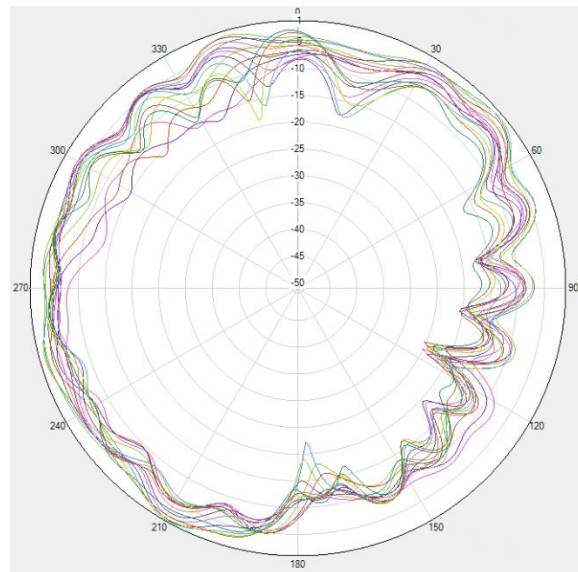
Phi=90deg



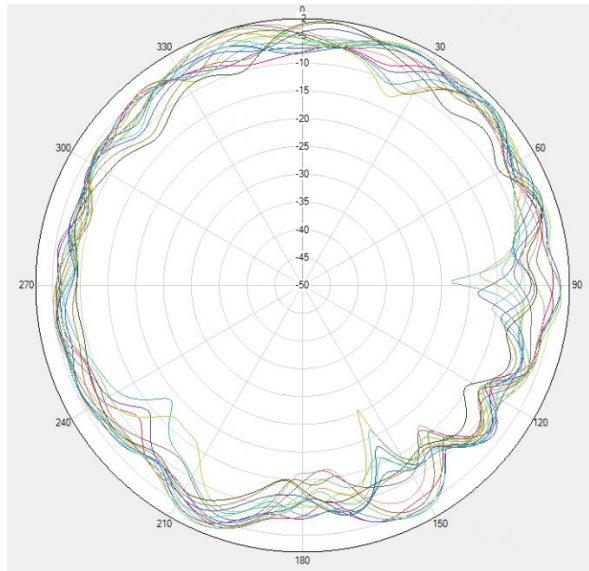
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※ Antenna Gain

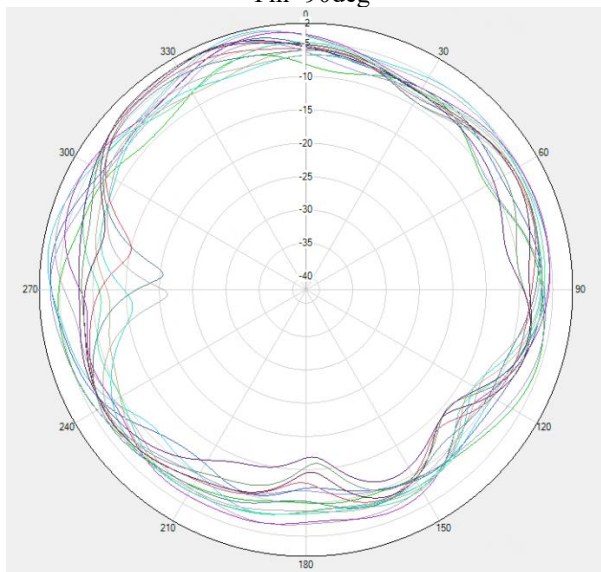
WiFi 5G MIMO Antenna



Phi=0deg



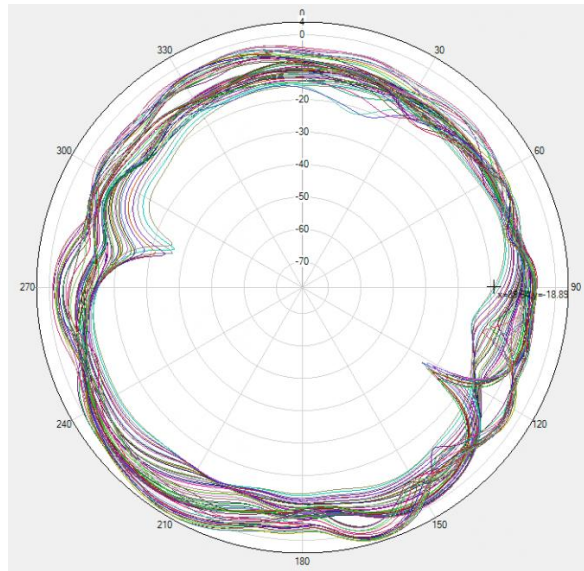
Phi=90deg



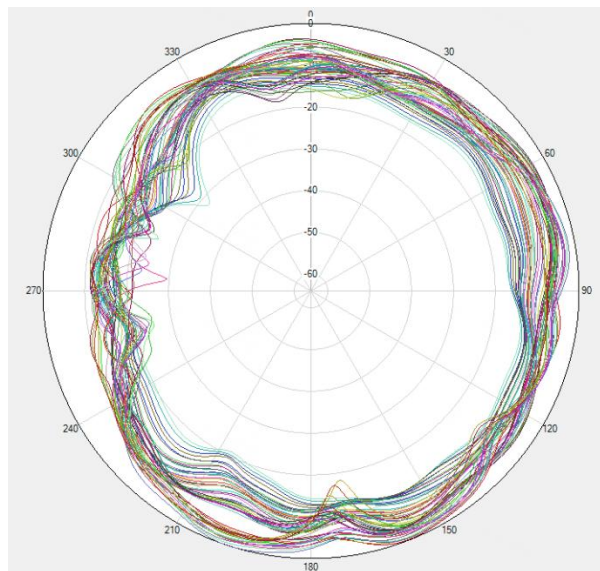
Theta=90deg

※ Antenna Gain

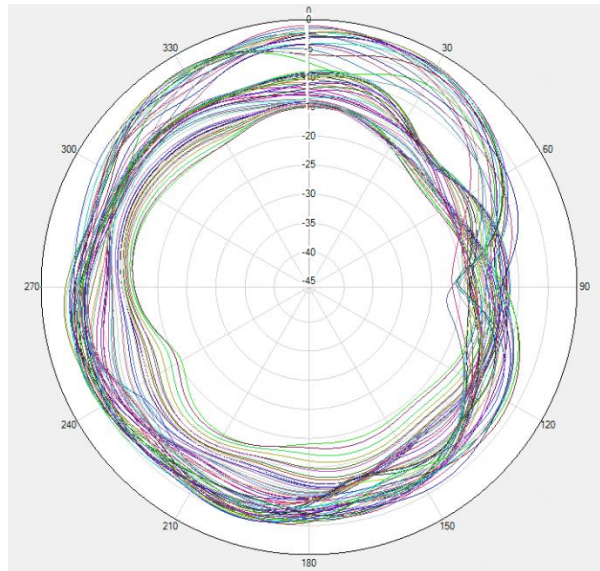
N1/N3 DRX&N77/N78 PRX Antenna



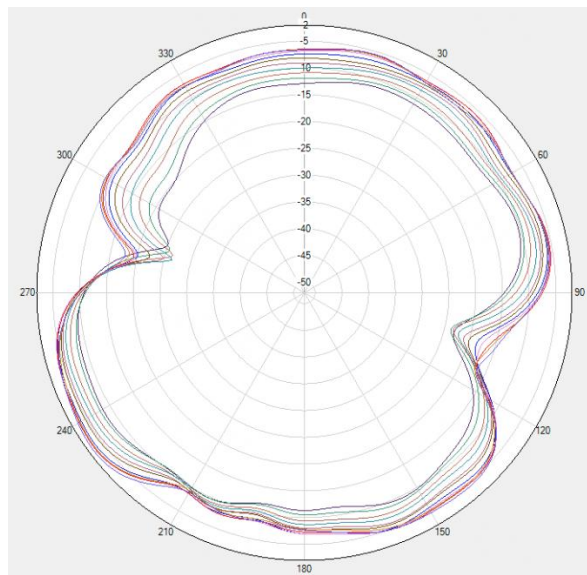
N1/N77/N78 $\Phi=0^\circ$



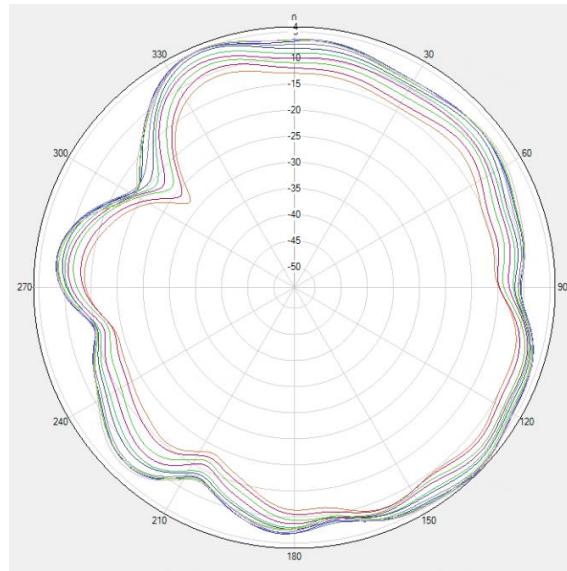
N1/N77/N78 $\Phi=90^\circ$



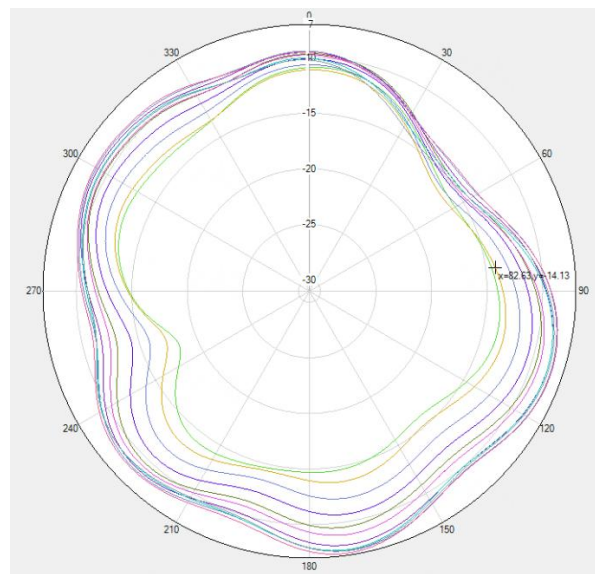
N1/N77/N78 Theta=90deg



N3 Phi=0deg



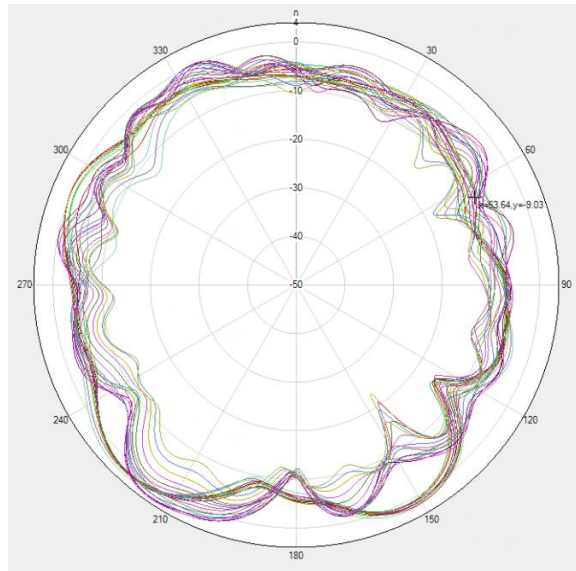
N3 Phi=90deg



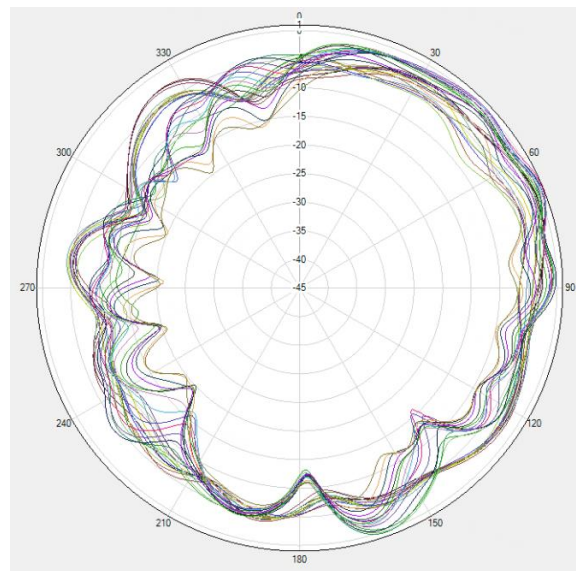
N3 Theta=90deg

※ Antenna Gain

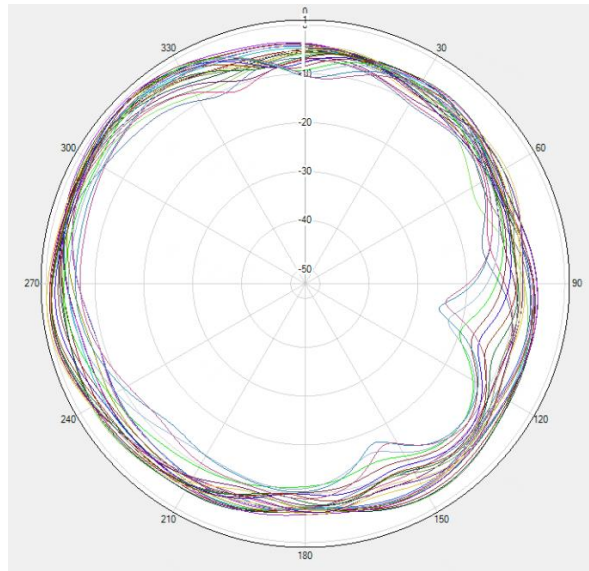
WIFI 2.4G&WIFI 5G Antenna



Phi=0deg



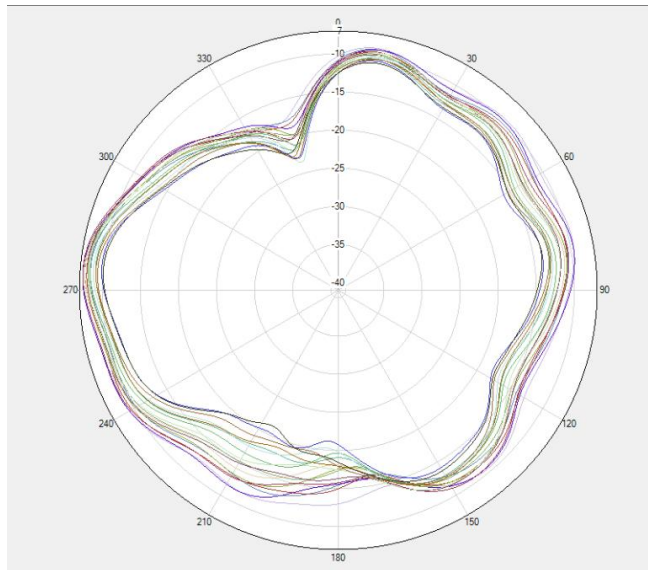
Phi=90deg



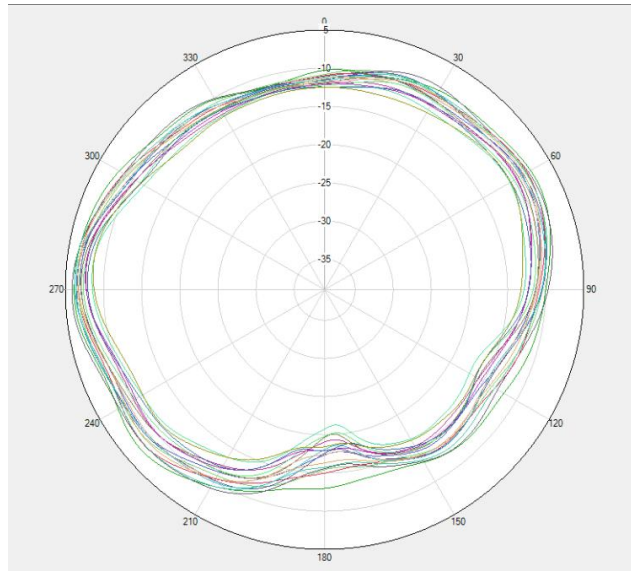
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※ Antenna Gain

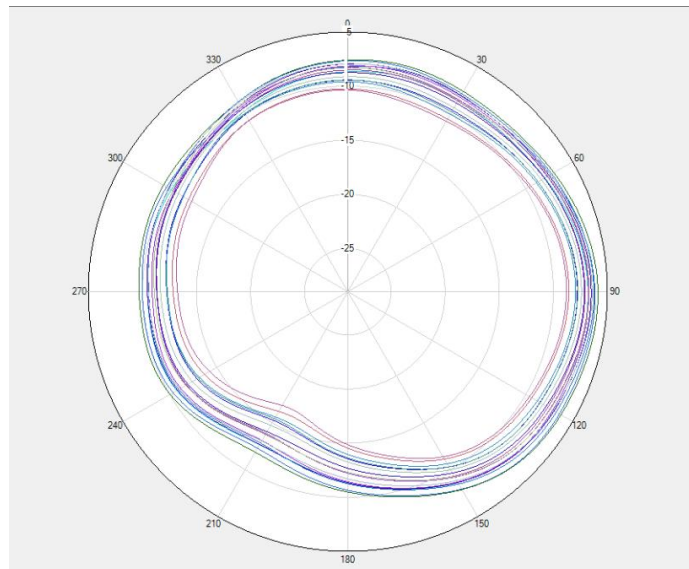
LB PRX Antenna



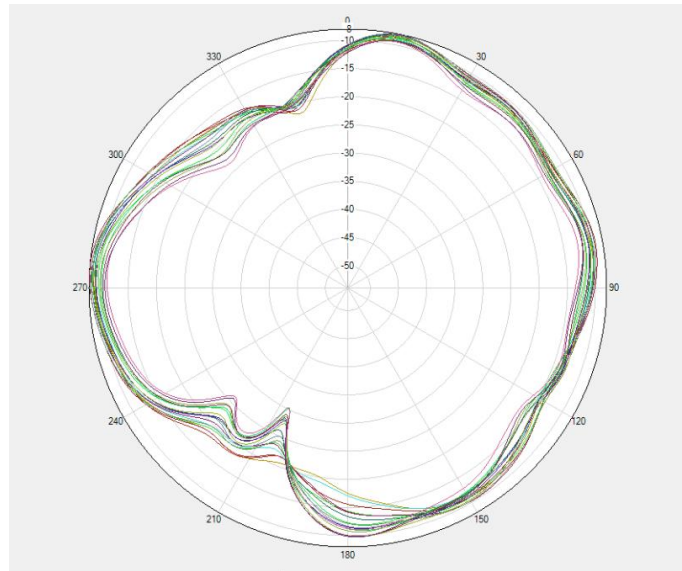
GSM 850/WCDMA B5/LTE B5/NR N5 Phi=0deg



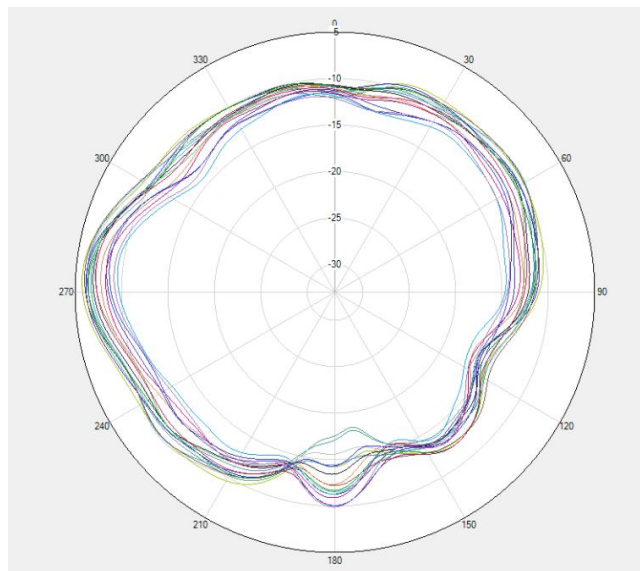
GSM 850/WCDMA B5/LTE B5/NR N5 Phi=90deg



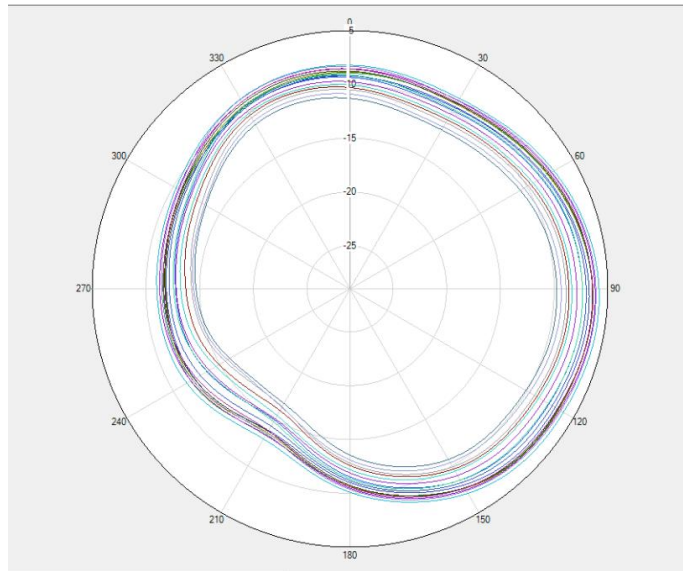
GSM 850/WCDMA B5/LTE B5/NR N5 Theta=90deg



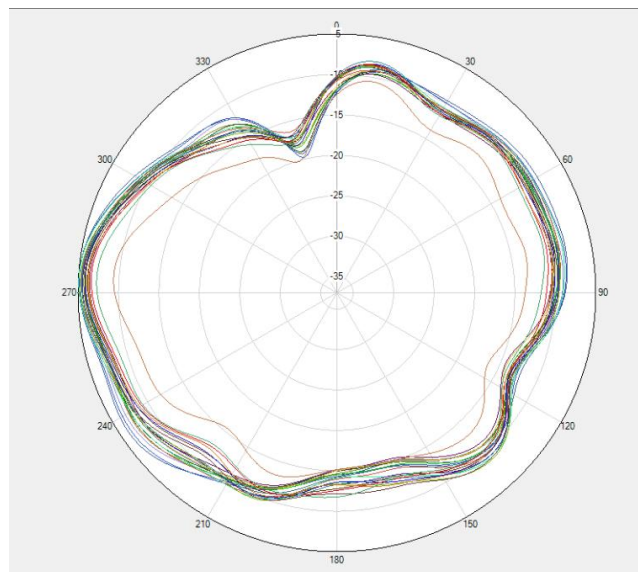
GSM 900/WCDMA B8/LTE B8/NR N8 $\Phi=0^\circ$



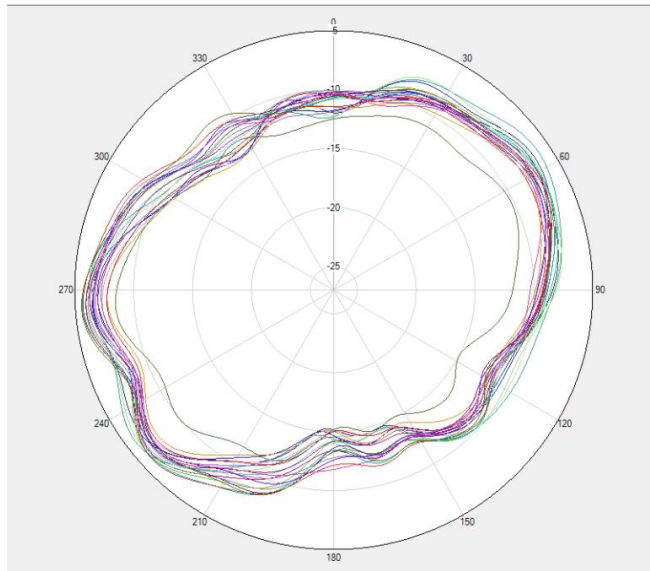
GSM 900/WCDMA B8/LTE B8/NR N8 $\Phi=90^\circ$



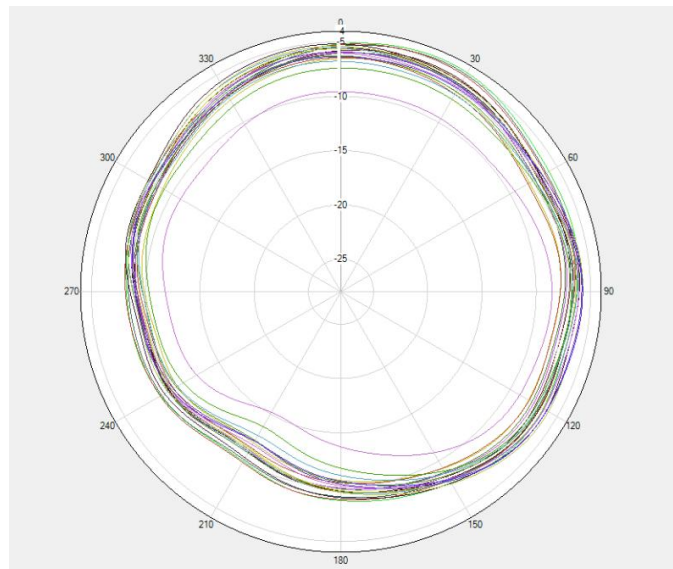
GSM 900/WCDMA B8/LTE B8/NR N8 Theta=90deg



LTE B12/B17/B20/B28 Phi=0deg



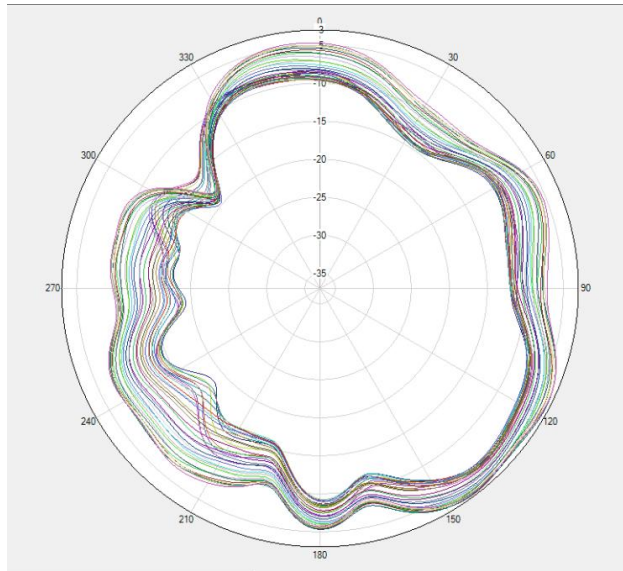
LTE B12/B17/B20/B28 Phi=90deg



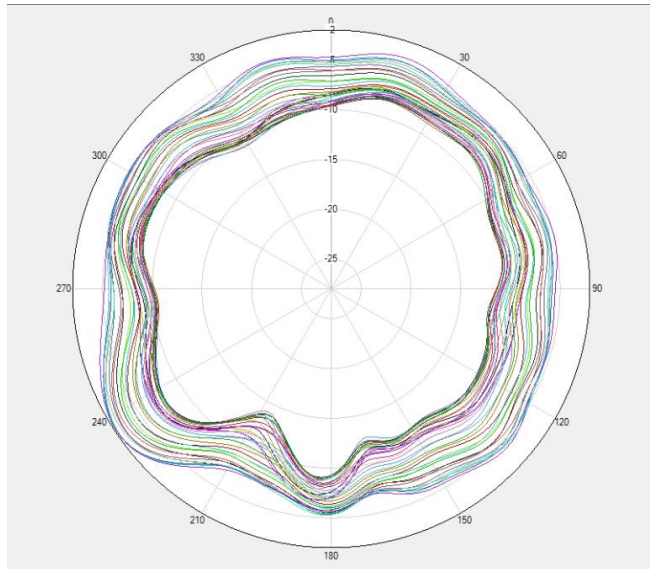
LTE B12/B17/B20/B28 Theta=90deg

※ Antenna Gain

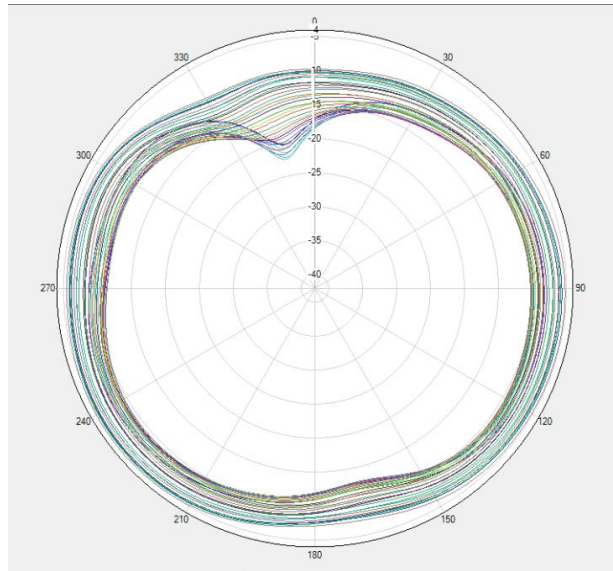
MHB DRX Antenna



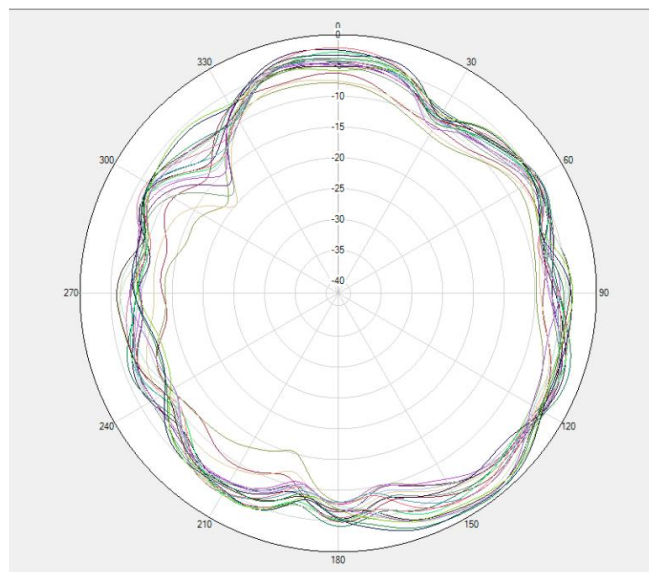
DCS/LTE B3/NR N3 $\Phi=0^\circ$



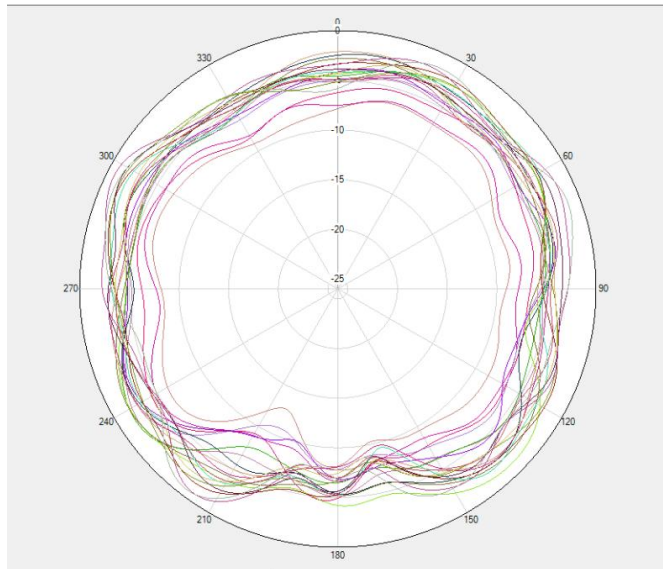
DCS/LTE B3/NR N3 $\Phi=90^\circ$



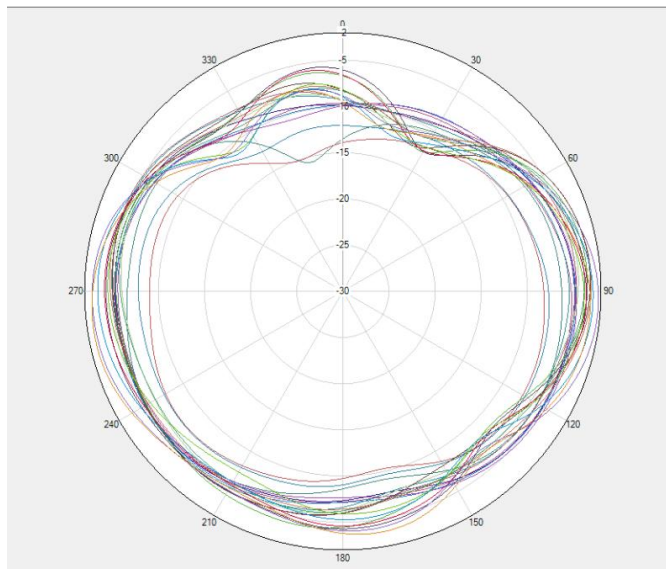
DCS/LTE B3/NR N3 Theta=90deg



PCS/WCDMA B1/B2/B4/LTE B1/B2/B4/B7/B38/B40/B41/B66 Phi=0deg



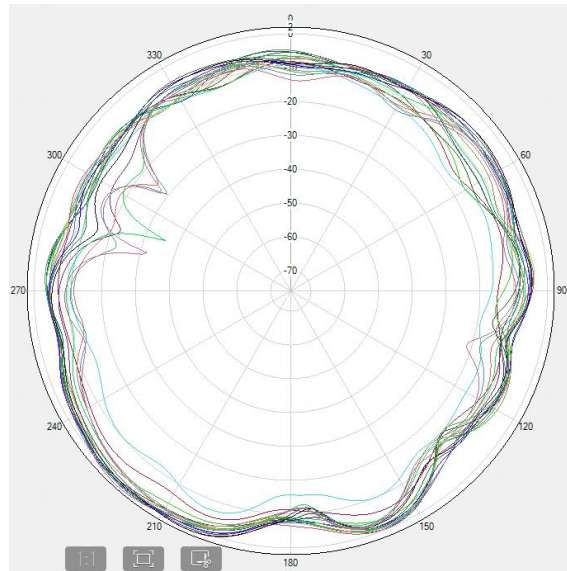
PCS/WCDMA B1/B2/B4/LTE B1/B2/B4/B7/B38/B40/B41/B66 Phi=90deg



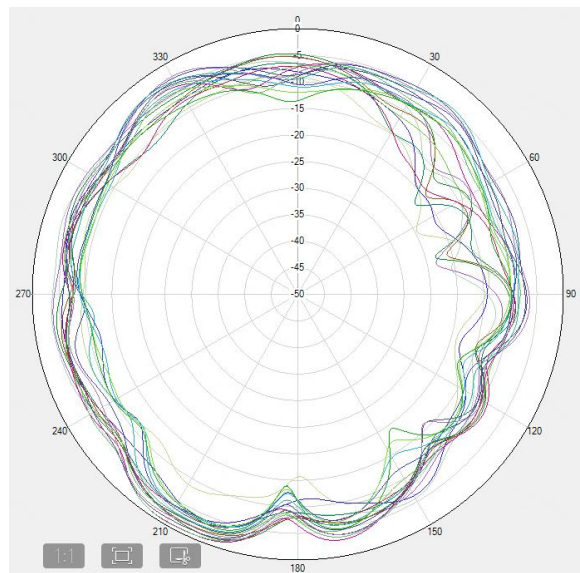
PCS/WCDMA B1/B2/B4/LTE B1/B2/B4/B7/B38/B40/B41/B66 Theta=90deg

※ Antenna Gain

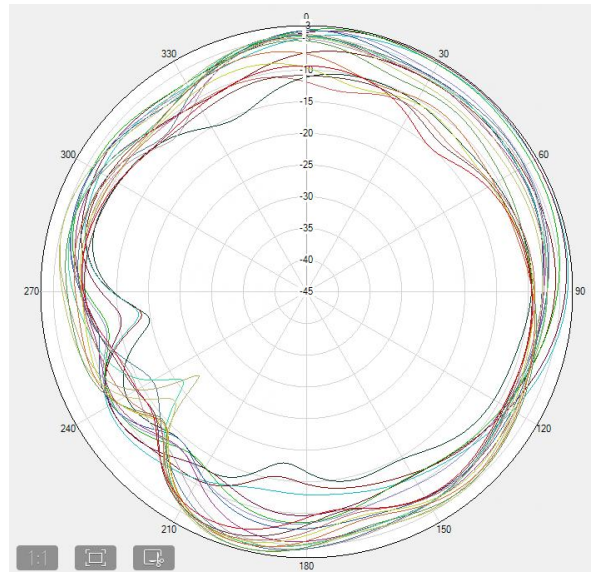
N77/N78 DRX(LDS) Antenna



Phi=0deg

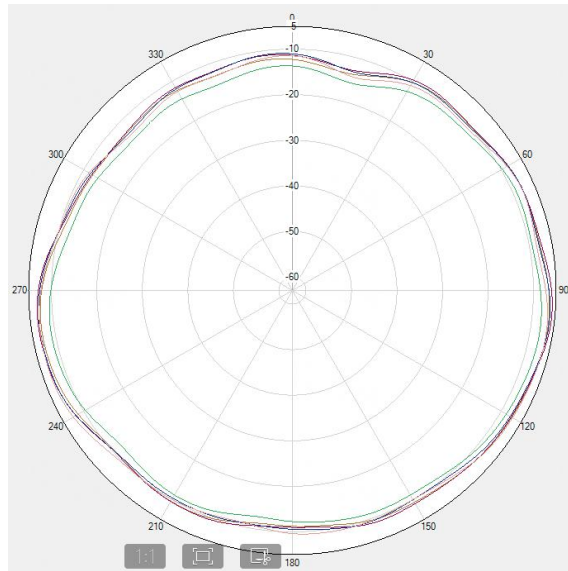


Phi=90deg

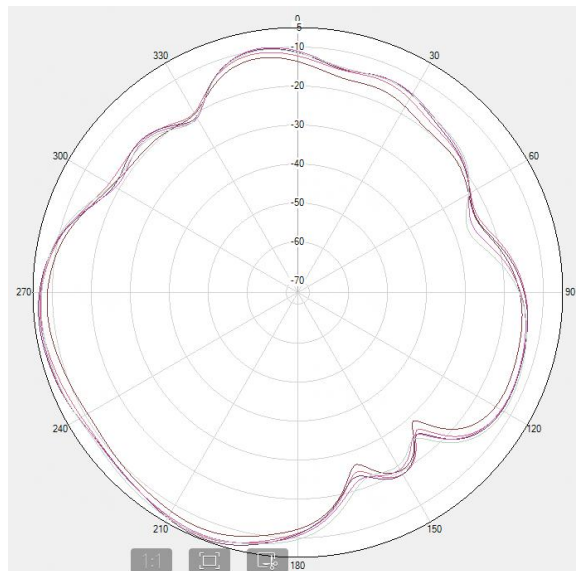


※ Antenna Gain

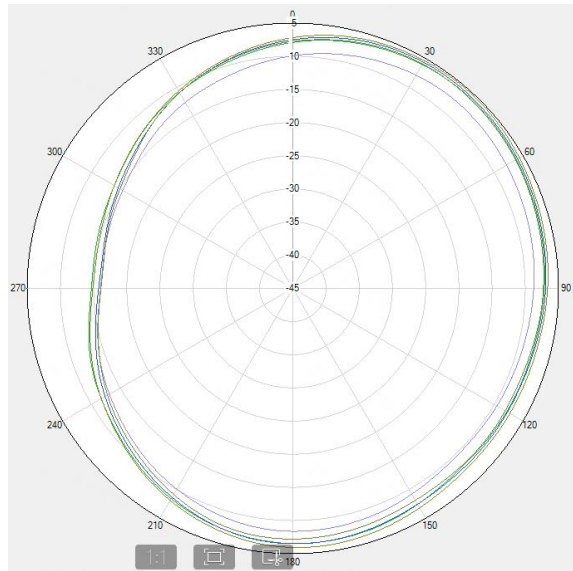
LB DRX&B7/B38/B40/B41 Antenna



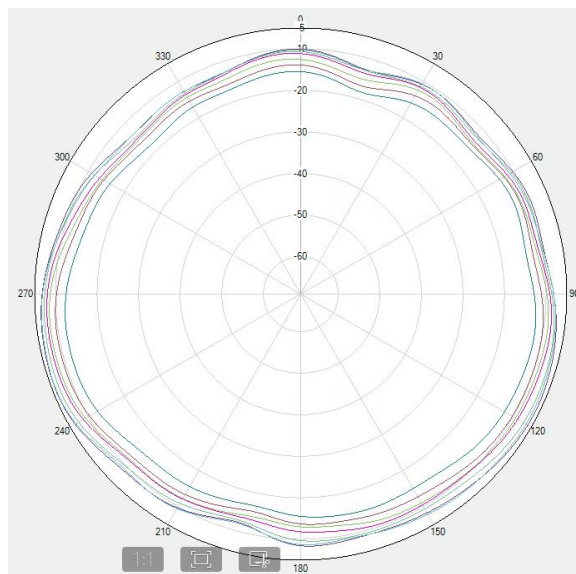
GSM 850/WCDMA B5/LTE B5/NR N5 Phi=0deg



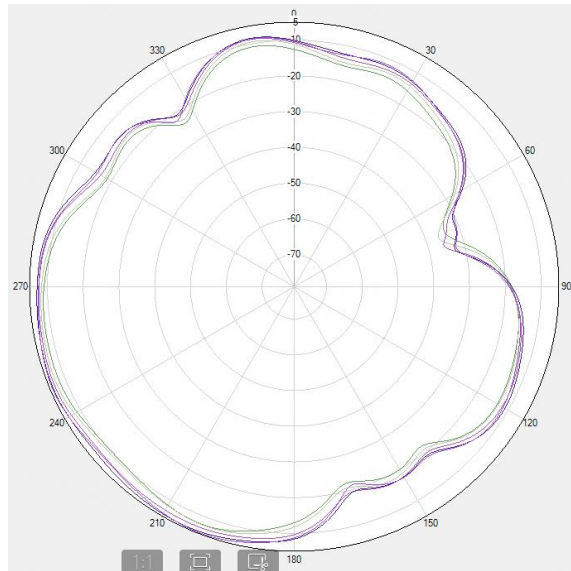
GSM 850/WCDMA B5/LTE B5/NR N5 Phi=90deg



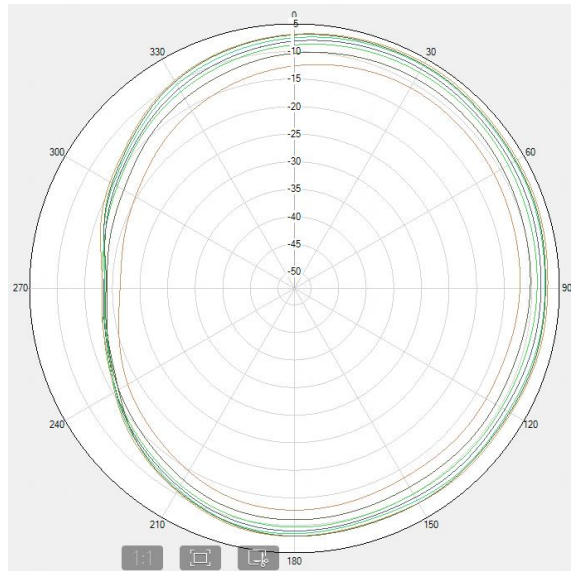
GSM 850/WCDMA B5/LTE B5/NR N5 Theta=90deg



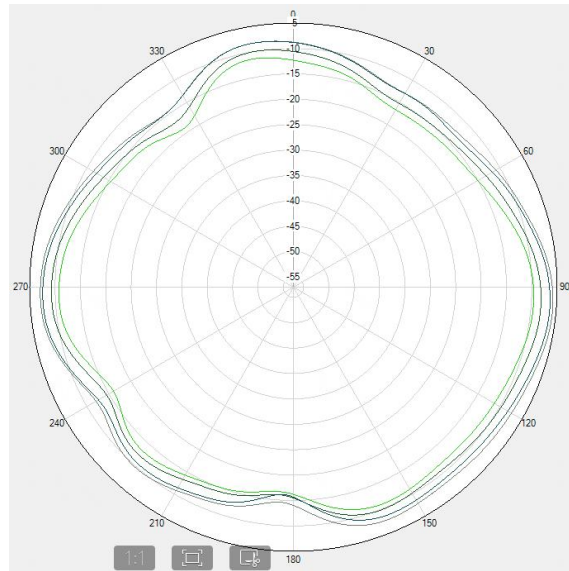
GSM 900/WCDMA B8/LTE B8/NR N8 Phi=0deg



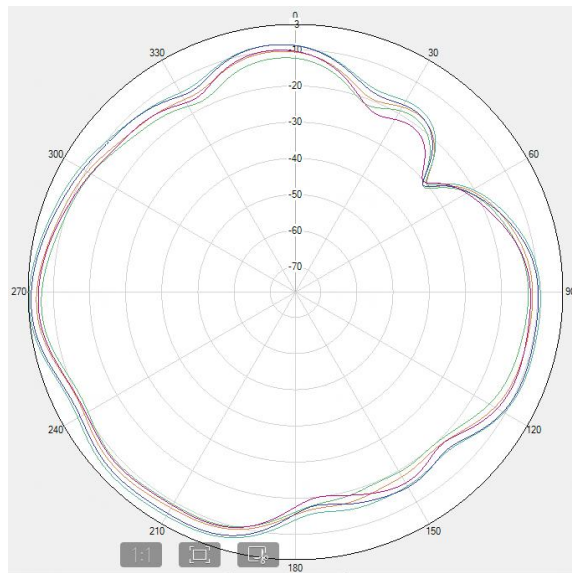
GSM 900/WCDMA B8/LTE B8/NR N8 $\Phi = 90^\circ$



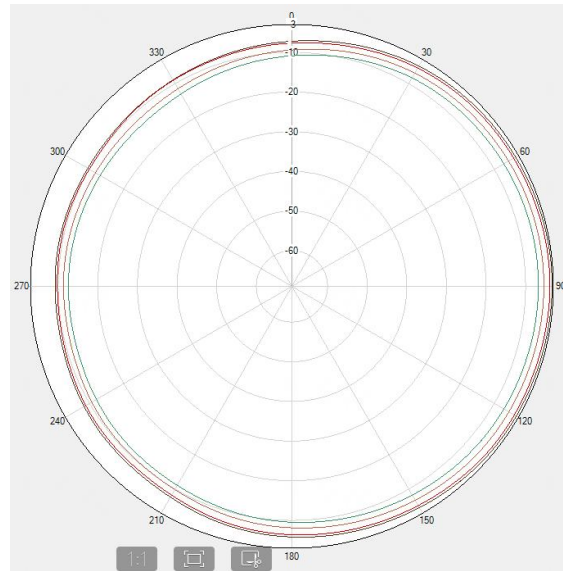
GSM 900/WCDMA B8/LTE B8/NR N8 $\Theta = 90^\circ$



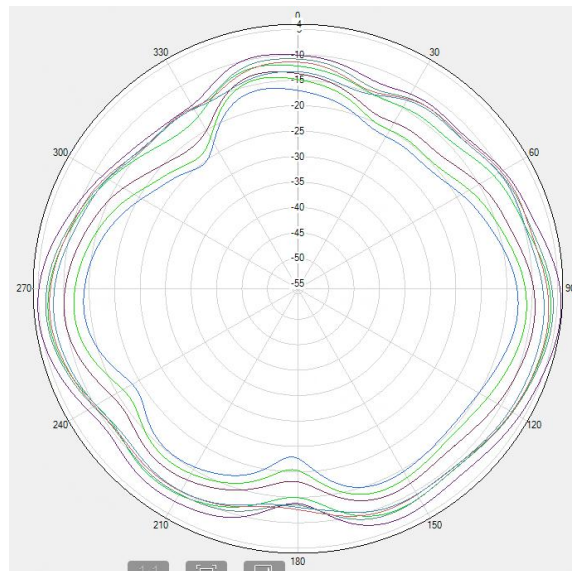
LTE B12/B17 $\Phi=0^\circ$



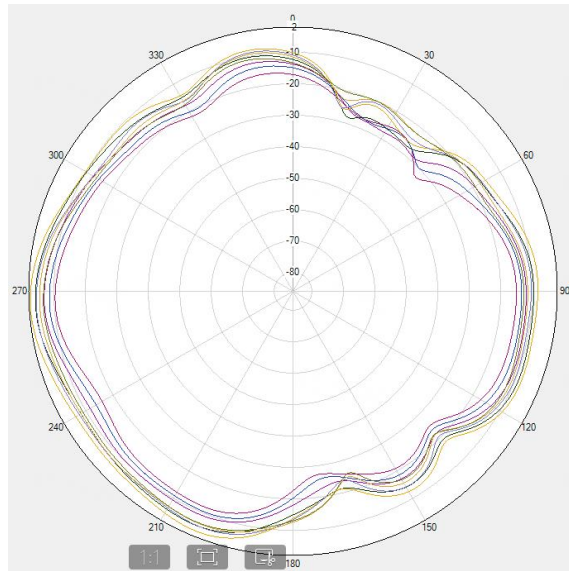
LTE B12/B17 $\Phi=90^\circ$



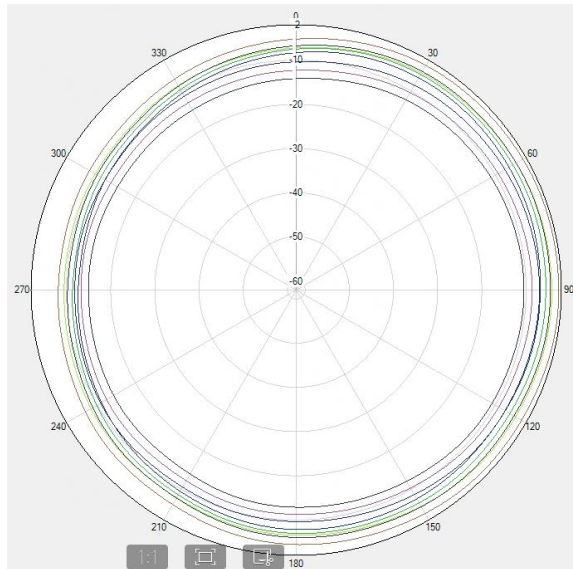
LTE B12/B17 Theta=90deg



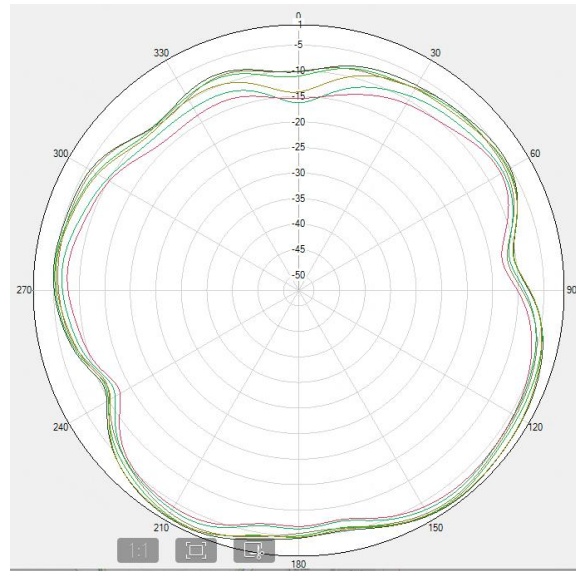
LTE B20/B28 Phi=0deg



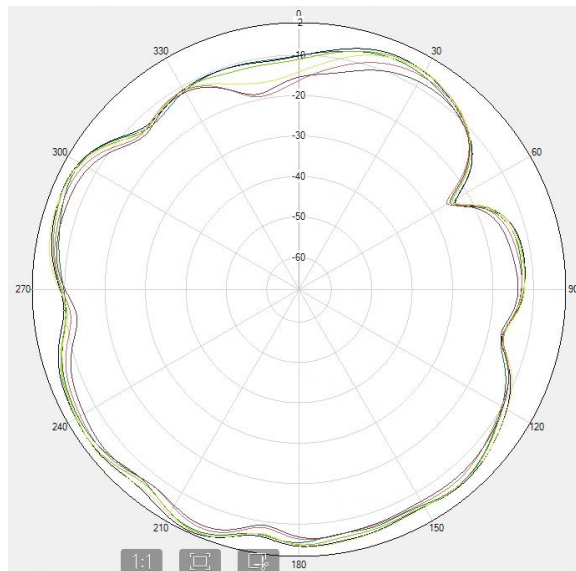
LTE B20/B28 $\Phi = 90^\circ$



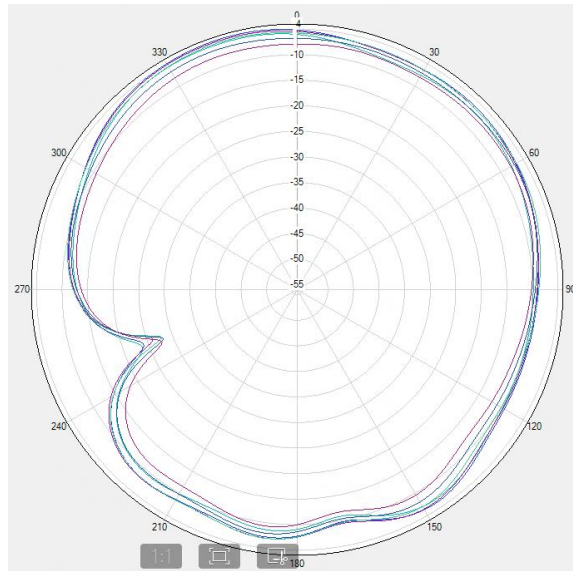
LTE B20/B28 $\Theta = 90^\circ$



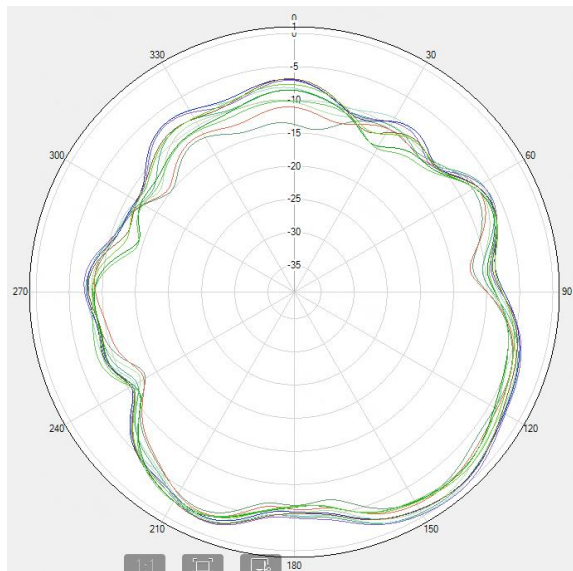
LTE B40 $\Phi=0^\circ$



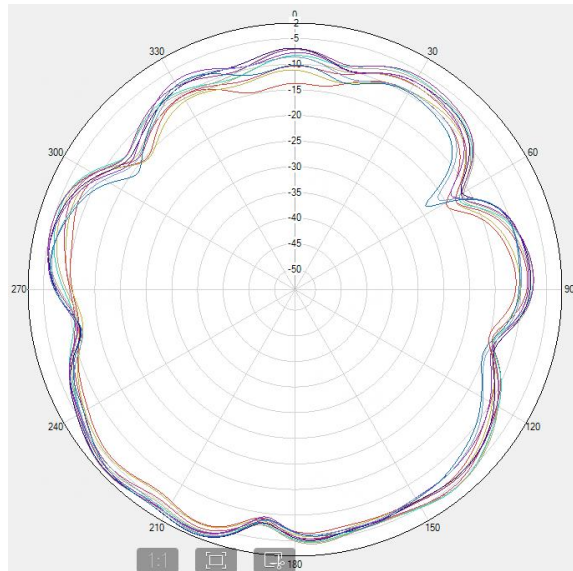
LTE B40 $\Phi=90^\circ$



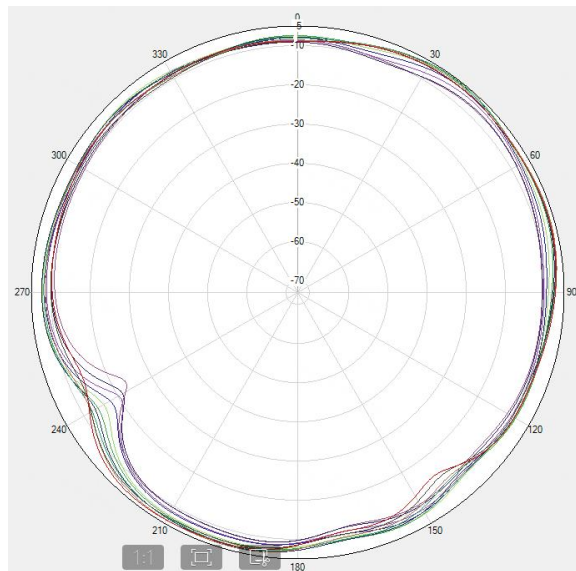
LTE B40 Theta=90deg



LTE B7/B38/B41 Phi=0deg



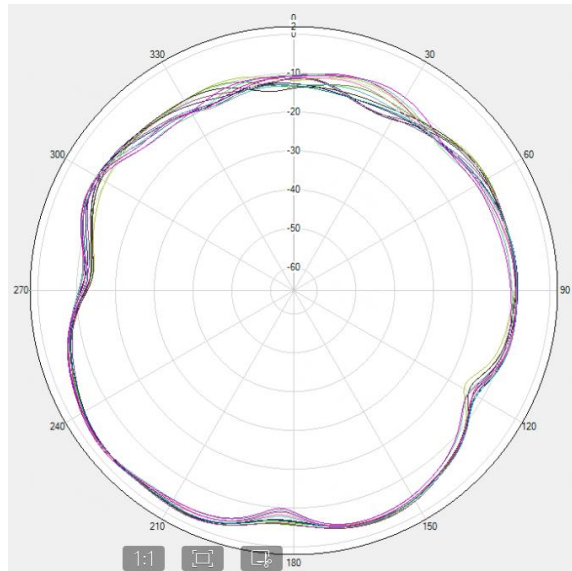
LTE B7/B38/B41 $\Phi = 90^\circ$



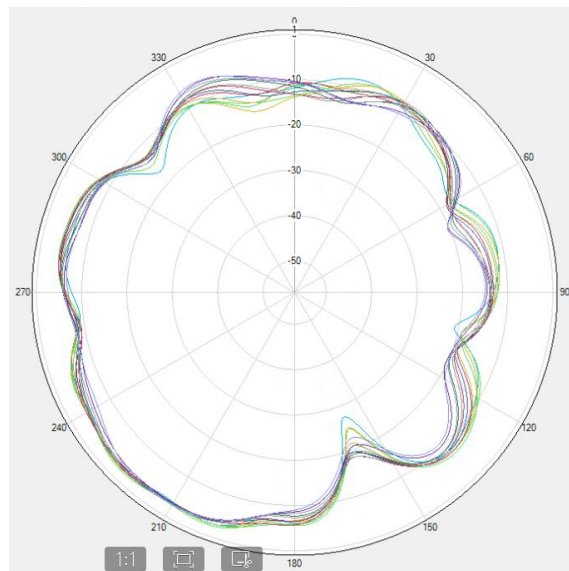
LTE B7/B38/B41 $\Theta = 90^\circ$

※ Antenna Gain

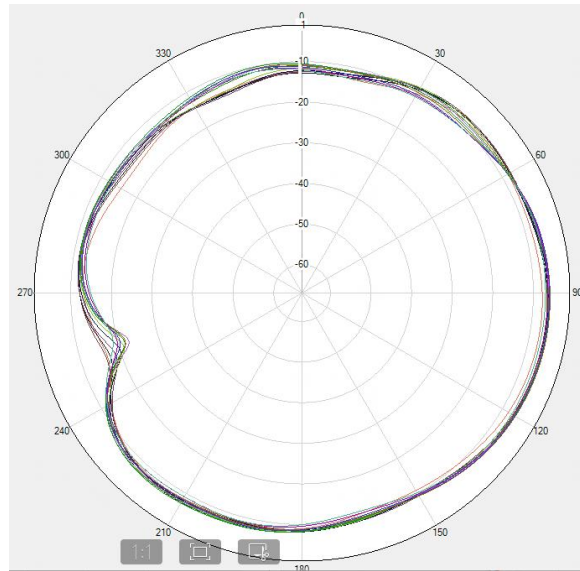
N1/N3/N7/N38/N40/N41 PRX&N77/N78 DRX Antenna



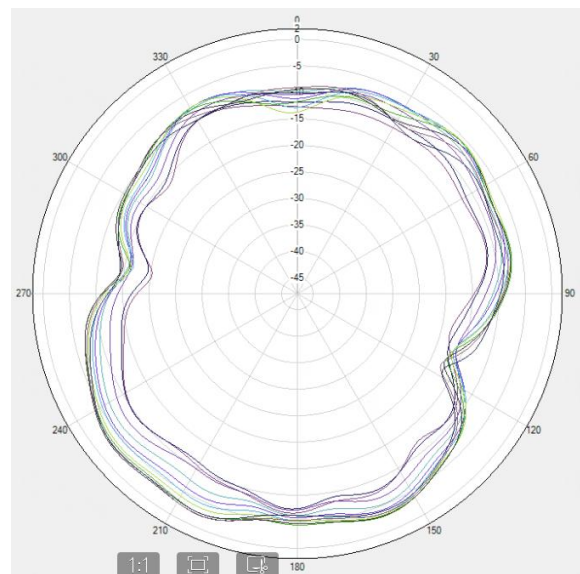
N1 $\Phi = 0^\circ$



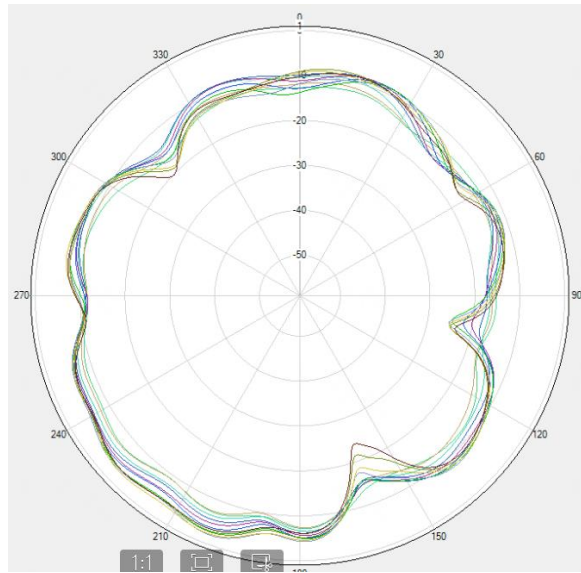
N1 $\Phi = 90^\circ$



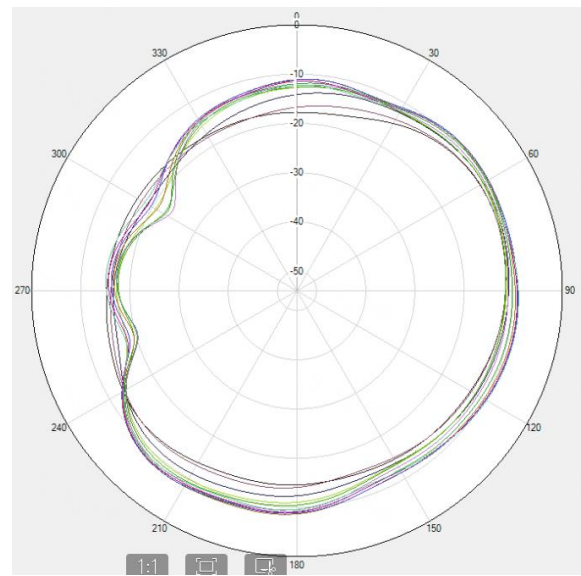
N1 Theta=90deg



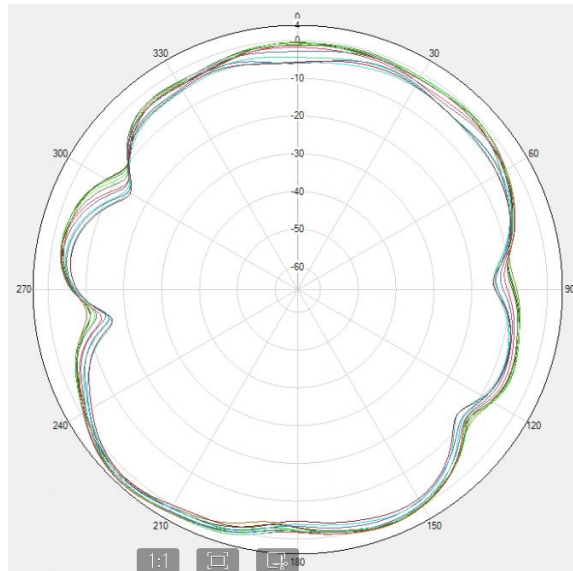
N3 Phi=0deg



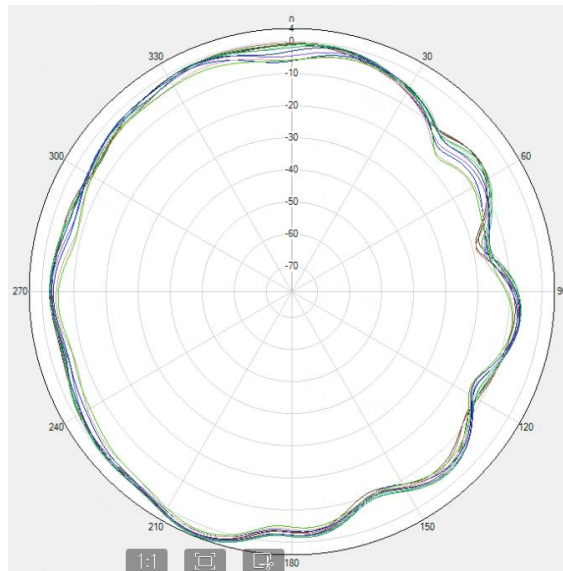
N3 Phi=90deg



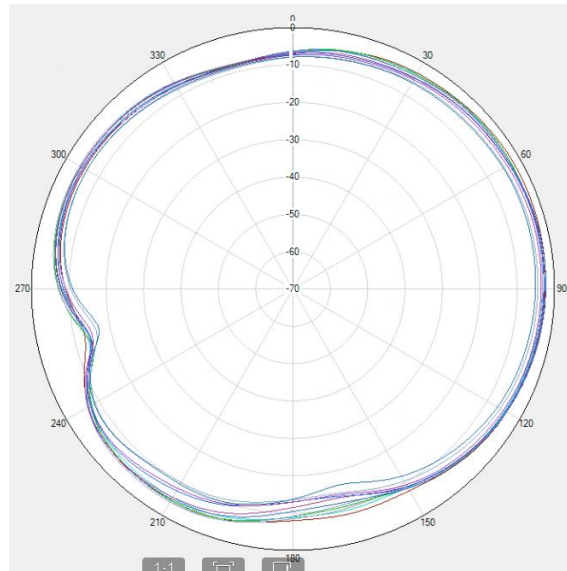
N3 Theta=90deg



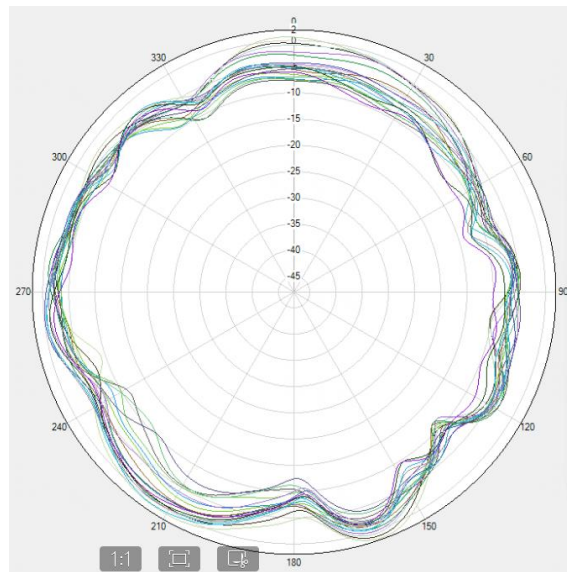
N7/N40/N41 $\Phi=0^\circ$



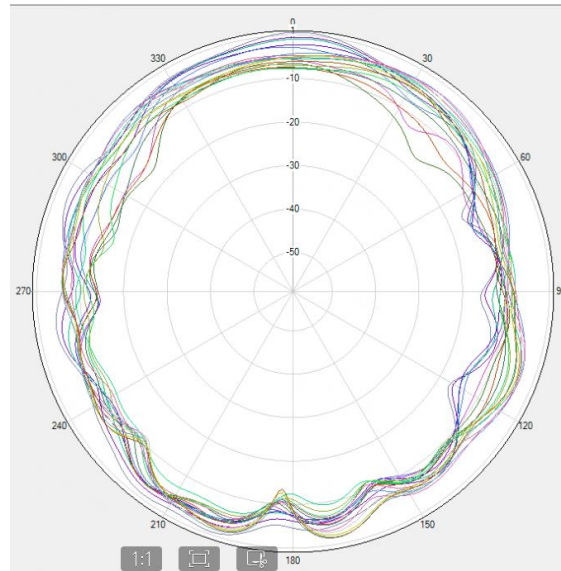
N7/N40/N41 $\Phi=90^\circ$



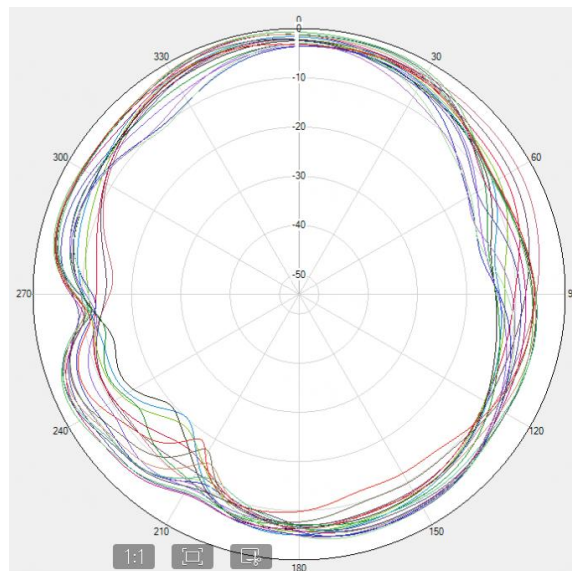
N7/N40/N41 Theta=90deg



N77/N78 Phi=0deg



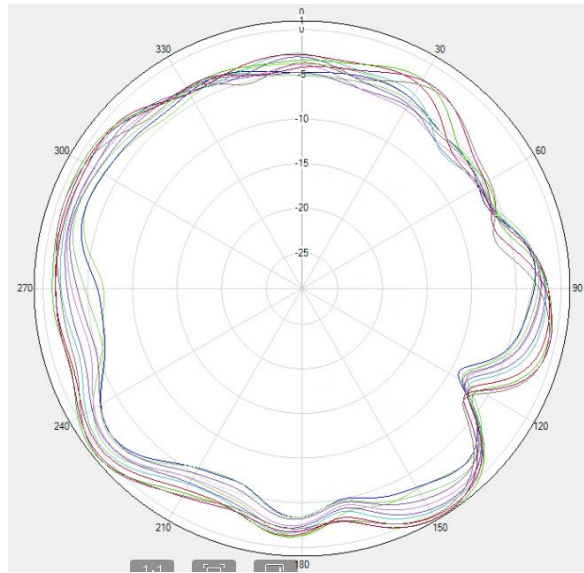
N77/N78 Phi=90deg



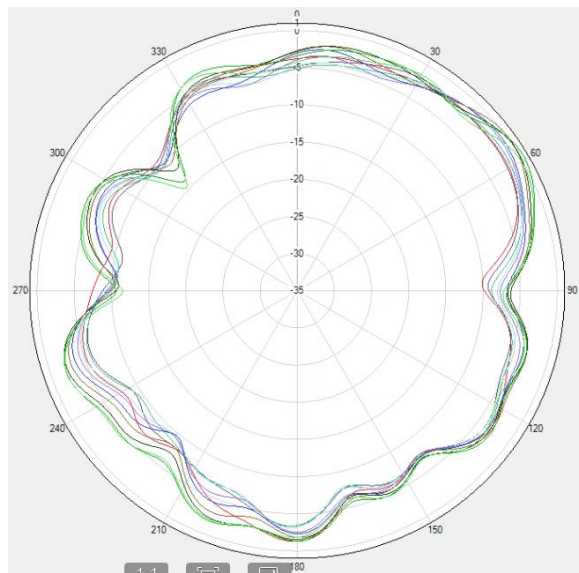
N77/N78 Theta=90deg

※ Antenna Gain

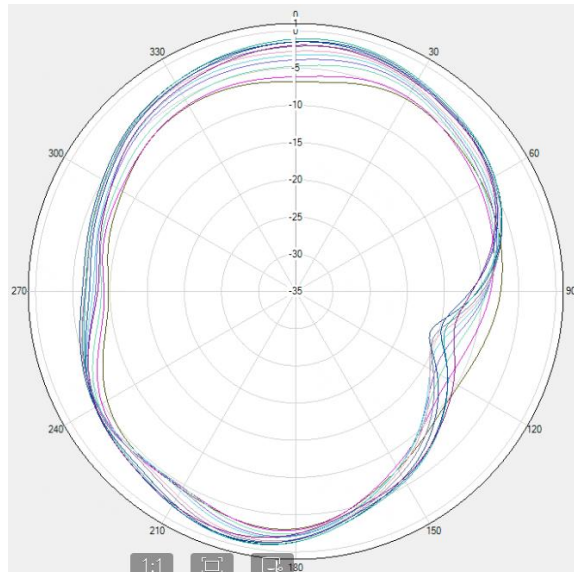
MHB PRX Antenna



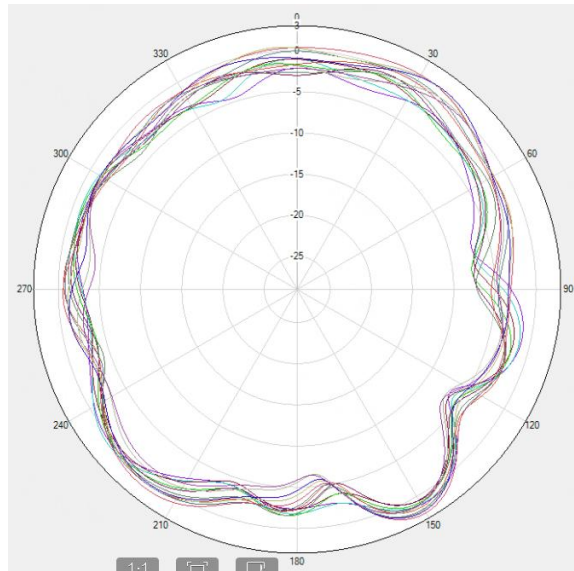
DCS/WCDMA B4/LTE B3/B4/B66 $\Phi=0^\circ$



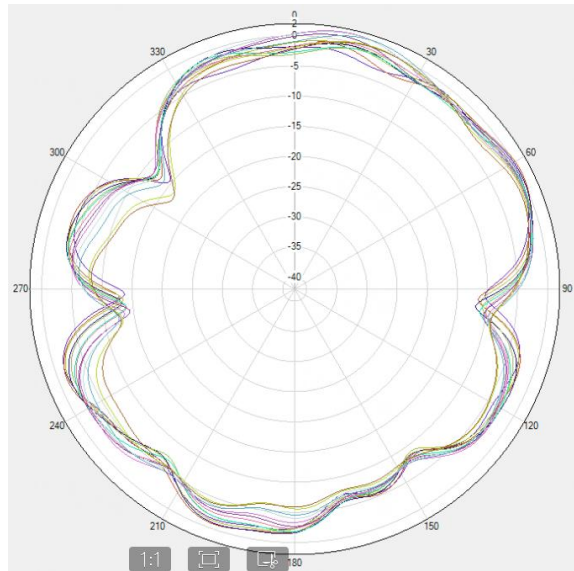
DCS/WCDMA B4/LTE B3/B4/B66 $\Phi=90^\circ$



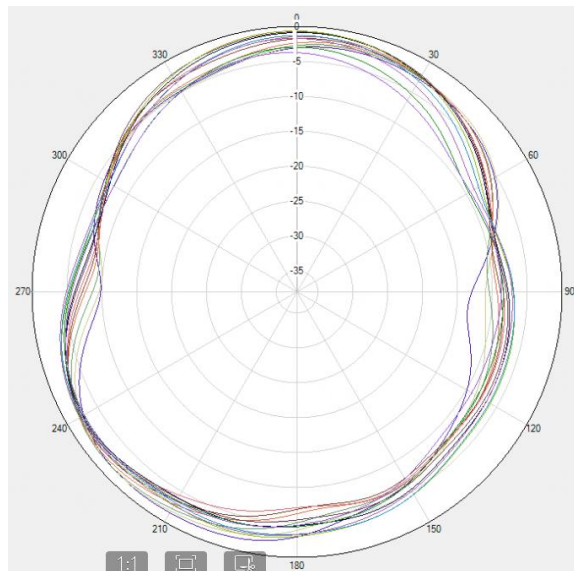
DCS/WCDMA B4/LTE B3/B4/B66 Theta=90deg



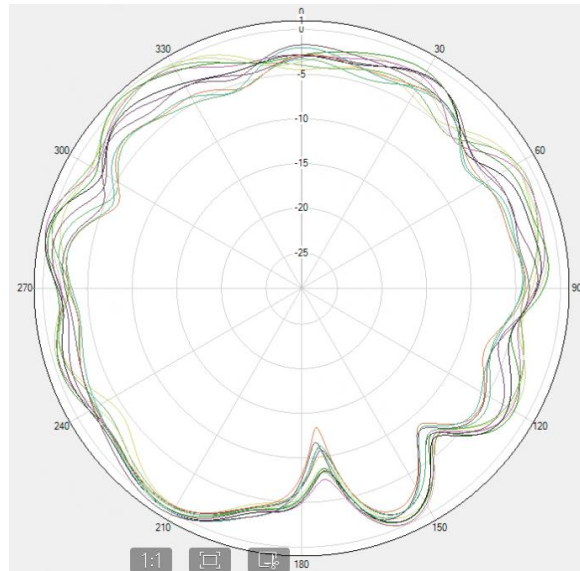
PCS/WCDMA B1/B2/LTE B1/B2 Phi=0deg



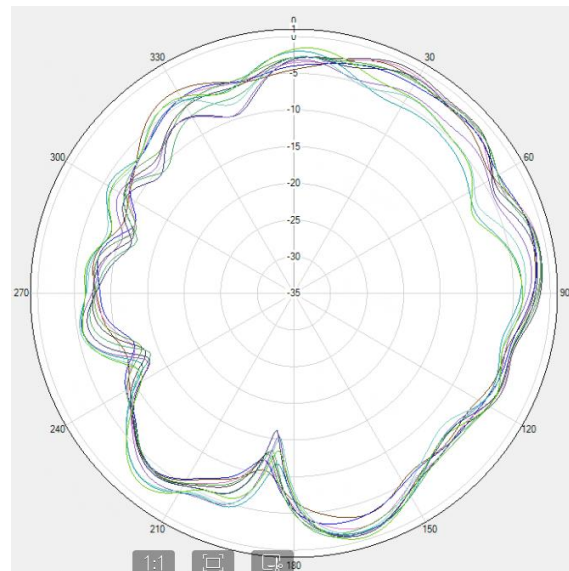
PCS/WCDMA B1/B2/LTE B1/B2 Phi=90deg



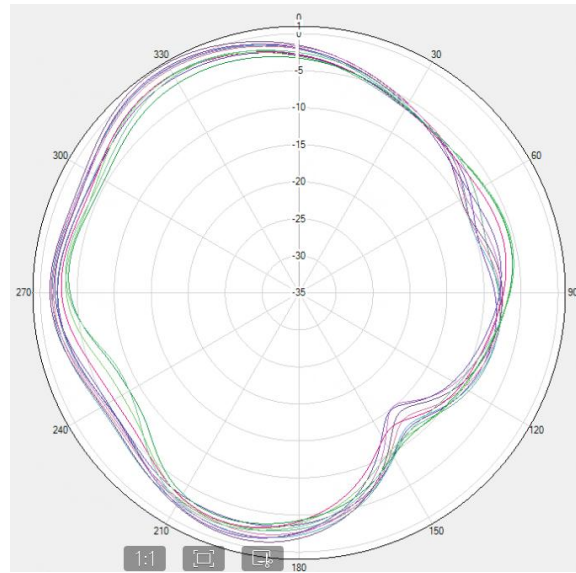
PCS/WCDMA B1/B2/LTE B1/B2 Theta=90deg



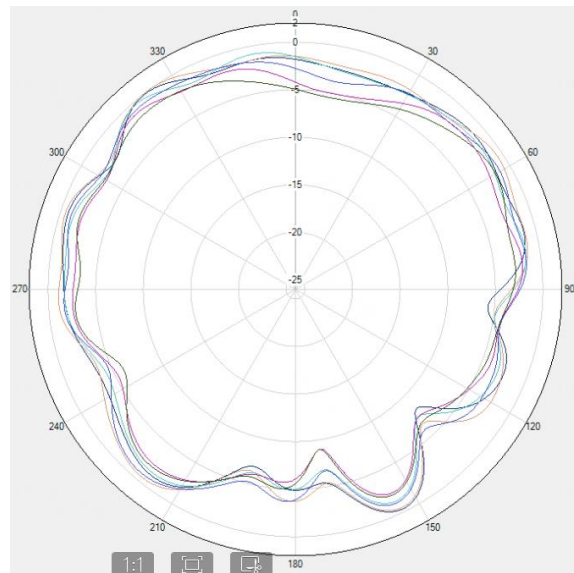
LTE B7/B38/B41 $\Phi=0^\circ$



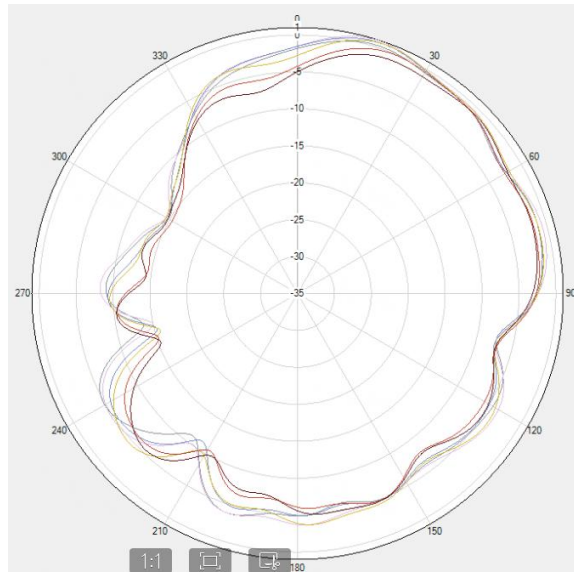
LTE B7/B38/B41 $\Phi=90^\circ$



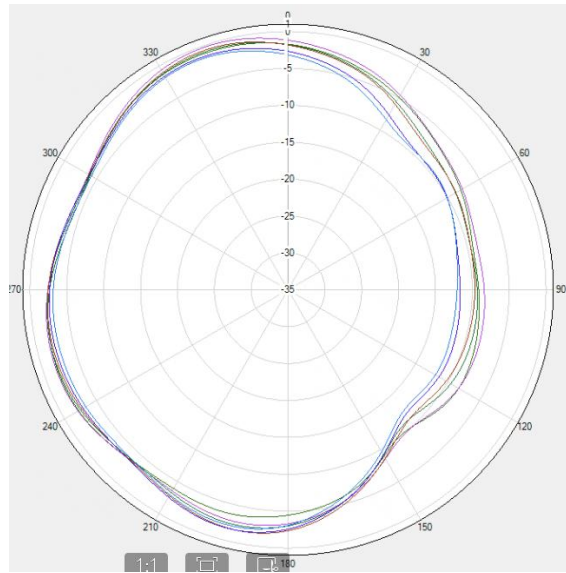
LTE B7/B38/B41 $\theta = 90^\circ$



LTE B40 $\phi = 0^\circ$



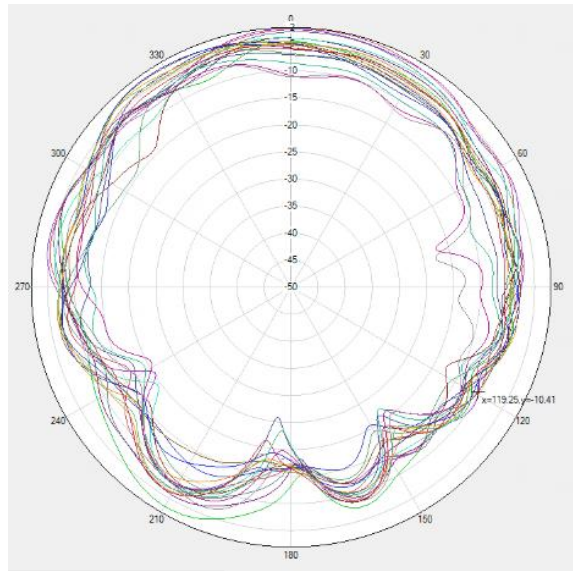
LTE B40 $\Phi=90\text{deg}$



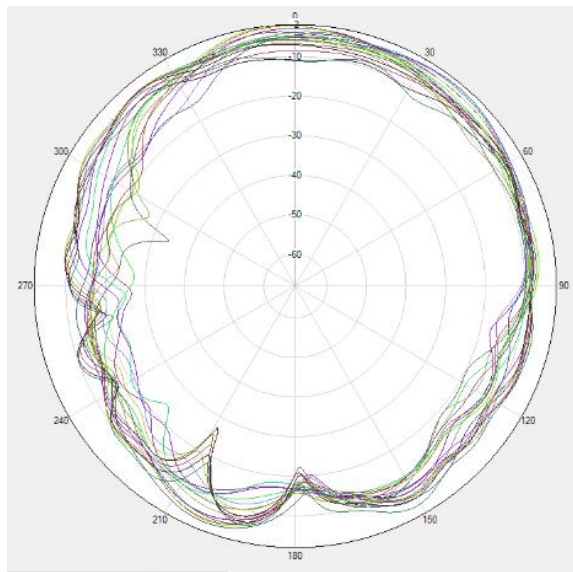
LTE B40 $\Theta=90\text{deg}$

※ Antenna Gain

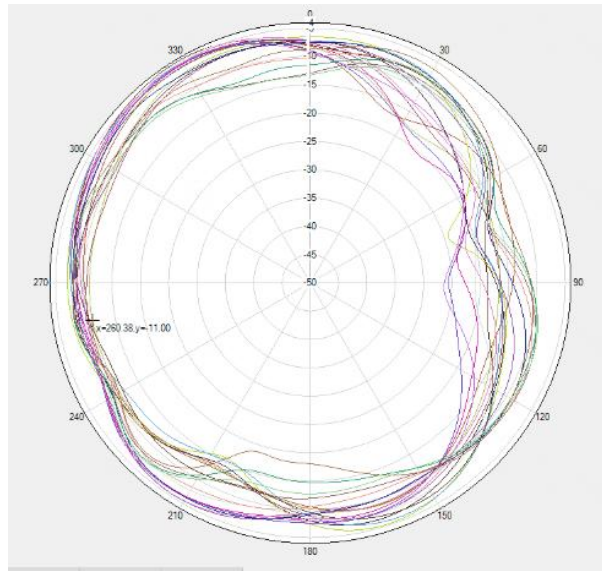
N77/N78 PRX MIMO(LDS) Antenna



Phi=0deg



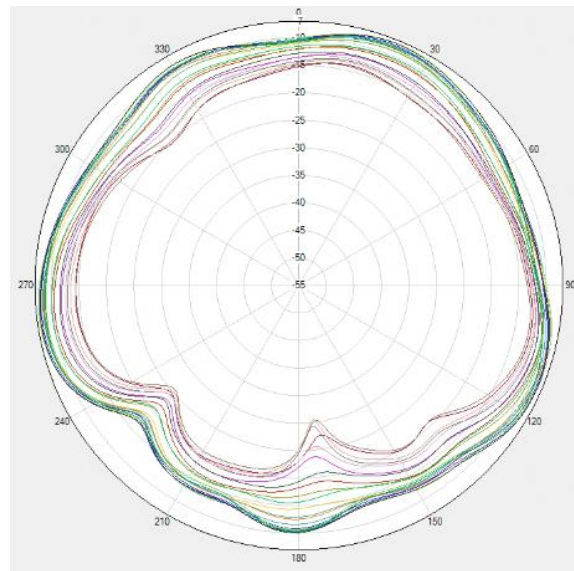
Phi=90deg



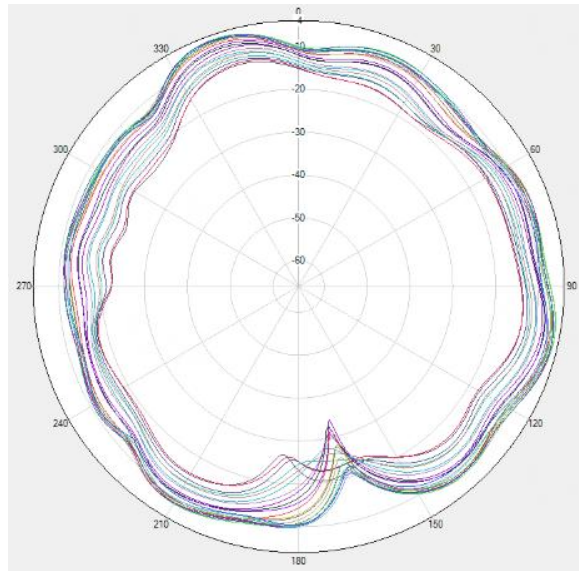
Theta=90deg

※ Antenna Gain

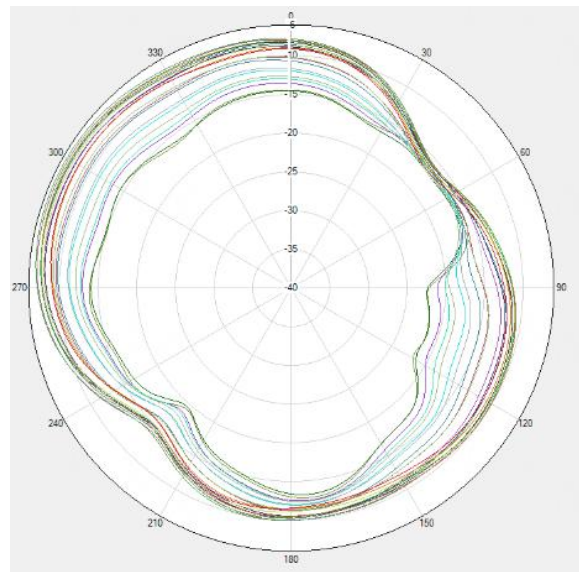
GPS L5 Antenna



Phi=0deg



Phi=90deg



Theta=90deg

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			DATE:	