

Electric Specifications

Transmitter Frequency	LTE 28/NR N28:699-748MHz
	GSM850/WCDMA B5/LTE B5/20/NR N5/20:824-862MHz
	GSM 900/WCDMA B8/LTE B8/NR N8:880-915MHz
	DCS 1800/WCDMA B4/LTE B3/4/66/NR N3/66:1710-1785MHz
	WCDMA B1/LTE B1/NR N1:1920-1980MHz
	PCS 1900/WCDMA B2/LTE B2:1850-1910MHz
	LTE B12/17/NR N12:704-715.9MHz
	LTE B7/38/41/NR N7/38/41:2500-2570MHz
	LTE B42/NR N77/78:3400-3600MHz
	LTE B40/NR N40:2300-2400MHz
Received Frequency	LTE 28/NR N28:758-803MHz
	GSM850/WCDMA B5/LTE B5/20/NR N5/20:869-894MHz 791-821MHz
	GSM 900/WCDMA B8/LTE B8/NR N8:925-960MHz
	DCS 1800/WCDMA B4/LTE B3/4/66/NR N3/66:1805-1880MHz 2110-2155MHz
	WCDMA B1/LTE B1/NR N1:2110-2170MHz
	PCS 1900/WCDMA B2/LTE B2:1930-1990MHz
	LTE B12/17/NR N12:734-746MHz
	LTE B7/38/41/NR N7/38/41:2555-2685MHz
	LTE B42/NR N77/78:3400-3600MHz
	LTE B40/NR N40:2300-2400MHz
Antenna Gain(Peak Gain)	WCDMA B1/LTE B1/NR N1:-1.2dBi
	PCS 1900/WCDMA B2/LTE B2:-1dBi
	DCS 1800/LTE B3/NR N3:-2dBi
	WCDMA B4/LTE B4:-3dBi
	GSM 850/WCDMA B5/LTE B5/NR N5:-6.9dBi
	LTE B7/NR N7:-2.7dBi
	GSM 900/WCDMA B8/LTE B8/NR N8:-6.9dBi
	LTE B12/NR N12:-6dBi
	LTE B17:-6dBi
	LTE B20/NR N20:-7.4dBi
	LTE B28/NR N28:-8.6dBi
	LTE B66/NR N66:-2.1dBi
	LTE B38/NR N38:-2.8dBi
	LTE B40/NR N40:-3.5dBi
	LTE B41/NR N41:0.7dBi
	LTE B42:2.4dBi
	NR N77:0.25dBi
	NR N78:1.8dBi
	GPS:-1.82dBi

	BT/WIFI 2.4G:-0.27dBi
	WIFI 5G:-0.65dBi

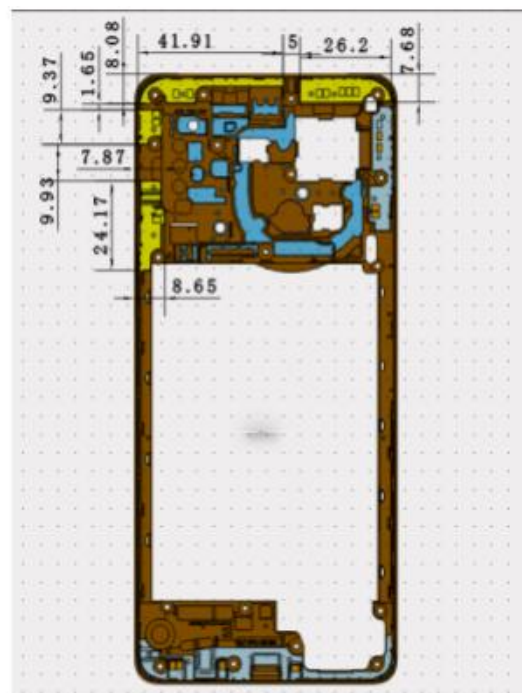
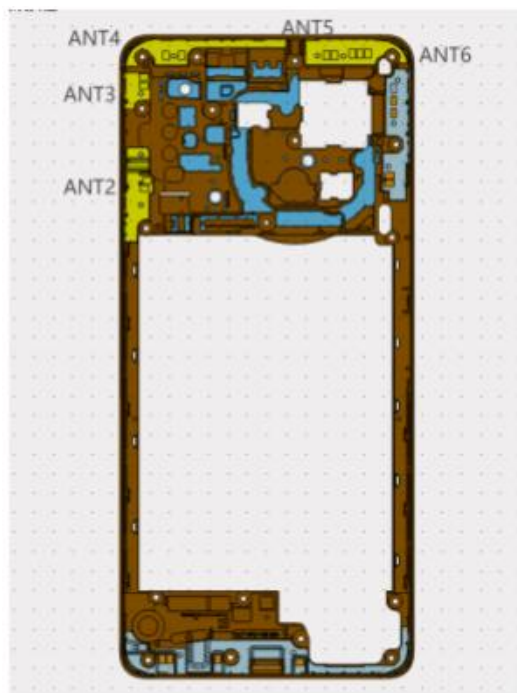
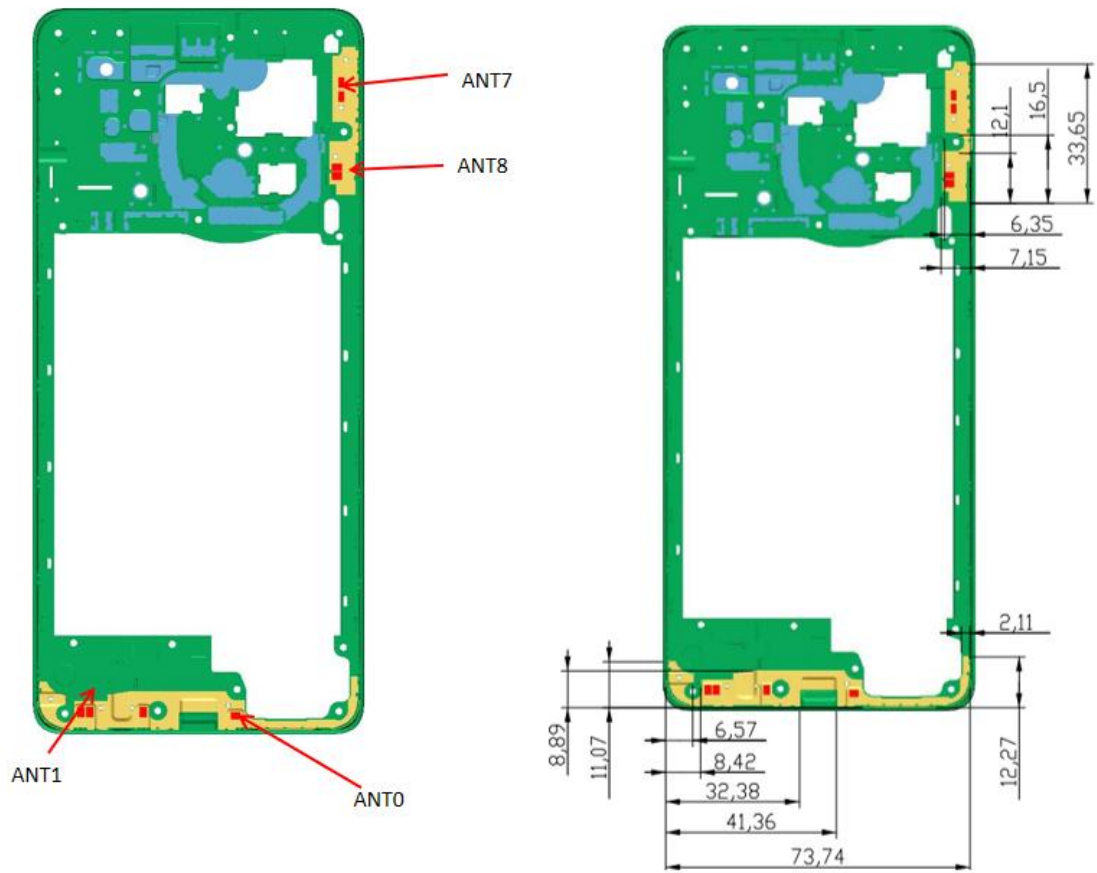
Antenna 4 Gain(Peak Gain)	WCDMA B1/LTE B1/NR N1:-2.6dBi
	PCS 1900/WCDMA B2/LTE B2:-2.2dBi
	DCS 1800/LTE B3/NR N3:-2.3dBi
	WCDMA B4/LTE B4:-4.2dBi
	GSM 850/WCDMA B5/LTE B5/NR N5:-6.1dBi
	LTE B7/NR N7:-0.5dBi
	GSM 900/WCDMA B8/LTE B8/NR N8:-6.3dBi
	LTE B12/NR N12:-8dBi
	LTE B17:-8.1dBi
	LTE B20/NR N20:-4.5dBi
	LTE B28/NR N28:-7.6dBi
	LTE B66/NR N66:-4.2dBi
	LTE B38/NR N38:-0.2dBi
	LTE B40/NR N40:-0.5dBi
	LTE B41/NR N41:-0.2dBi

Supplier information

Project Name: CL7		
Company:Etheta Communication Technology CO.,LTD		
Address: Zone B and D, 3rd Floor, Building 1, Baisha Technology Industrial Park, No. 3011 Shahe West Road, Nanshan District, Shenzhen		
Antenna Name	Model	Part Number
CL7-AHT0/1	RD992310NY17-1	CL7 ANT0/ANT1 FPC
CL7-ANT7/8	RD992310NY17-2	CL7 AHT7/ANT8 FPC

Project Name: CL7		
Company: KunShan Innnowave Communication Technology Co., Ltd.		
Address: Building H, Golden Land Intelligent Manufacturing Park, Shengchuang Road, Yushan Town, Kunshan City, Suzhou City, Jiangsu Province		
Antenna Name	Model	Part Number
CL7-ANT2	Rx-P7654(CL7)-1	RX-(CL7)ANT2-2346-A
CL7-ANT3	Rx-P7654(CL7)-2	RX-(CL7)ANT3-2346-A
CL7-ANT4	Rx-P7654(CL7)-3	RX-(CL7)ANT4-2346-A
CL7-ANT5/6	Rx-P7654(CL7)-4	RX-(CL7)ANT5/6-2346-A

Antenna size (unit: mm)



Antenna	Support Band
Ant 0	2G:B2 3 5 8 3G:B1 2 4 5 8 4G: B1 2 3 4 5 8 12 17 20 28 66 5G:n1 3 5 8 12 20 28 66
Ant 1	4G:B7 B38 B40 5G:N7 N38 N40 N41
Ant 2	4G:LTE B1 3 4 66 42 5G:n1 3 66 77 78
Ant 3	4G:B7 38 40 41 42 5G:n7 38 40 41 77 78
Ant 4	2G:B2 3 5 8 3G:B1 2 4 5 8 4G:B1 2 3 4 5 7 8 12 17 20 28 38 40 41 66 5G:n1 3 5 7 8 12 20 28 38 40 41 66
Ant 5	4G:B42 5G:N77 78
Ant 6	GPS/WIFI/BT
Ant 7	4G:LTE B1 3 4 7 38 40 66 41 5G:n1 3 7 38 40 41 66
Ant 8	4G:B42 5G:N77 N78

Antenna Average gain

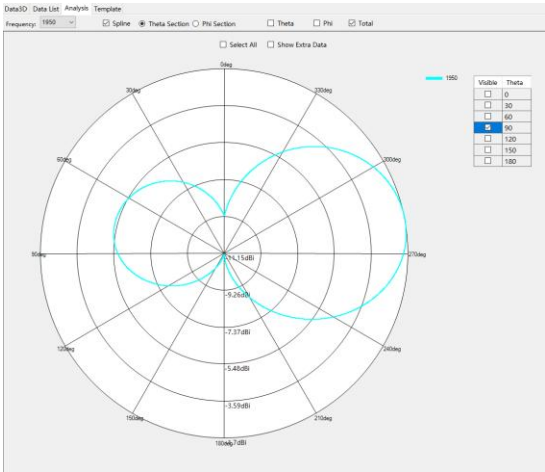
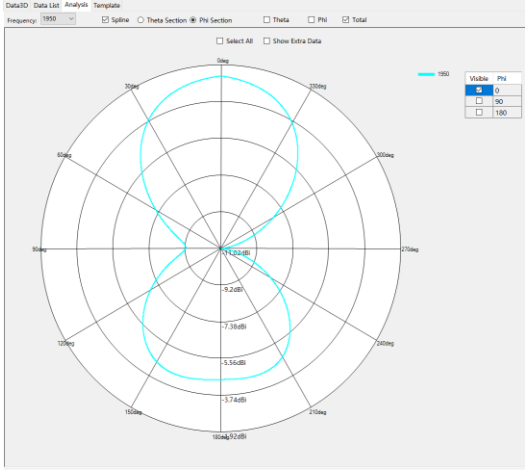
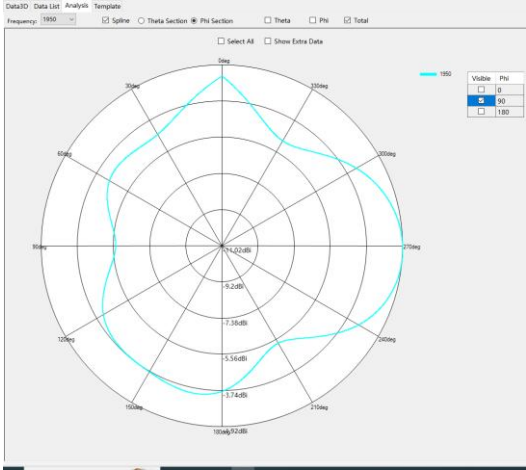
Band	ANT0 (dBi)	Band	ANT7 (dBi)	Band	ANT1 (dBi)
	Average		Average		Average
GSM850	-7.2	GSM1800	-11.8	LTE B7	-3.2
GSM900	-7.4	GSM1900	-12.1	LTE B38	-3.2
GSM1800	-3.1	WCDMA 1	-7.7	LTE B40	-3.9
GSM1900	-1.2	WCDMA 2	-12.1	NR N7	-3.2
WCDMA 1	-1.9	WCDMA 4	-7.6	NR N38	-3.2
WCDMA 2	-1.2	LTE B1	-7.7	NR N40	-3.9
WCDMA 4	-3.7	LTE B2	-12.1	Band	ANT8 (dBi)
WCDMA 5	-7.2	LTE B3	-11.8		Average
WCDMA 8	-7.4	LTE B4	-7.6	NR N77	-13.8
LTE B1	-1.9	LTE B7	-4.8	NR N78	-12.7
LTE B2	-1.2	LTE B38	-5.4		
LTE B3	-3.1	LTE B40	-7.8		
LTE B4	-3.7	LTE B66	-8		
LTE B5	-7.2	NR N1	-7.7		
LTE B8	-7.4	NR N3	-11.8		
LTE B12	-6.3	NR N7	-4.8		
LTE B17	-6.3	NR N38	-5.4		
LTE B20	-7.8	NR N40	-7.8		
LTE B28	-6.4	NR N66	-8		
LTE B66	-3.3				
NR N1	-1.9				
NR N3	-3.1				
NR N5	-7.2				
NR N7	-3.2				
NR N8	-7.4				

NR N12	-6.3
NR N20	-7.8
NR N28	-6.4
NR N66	-3.3

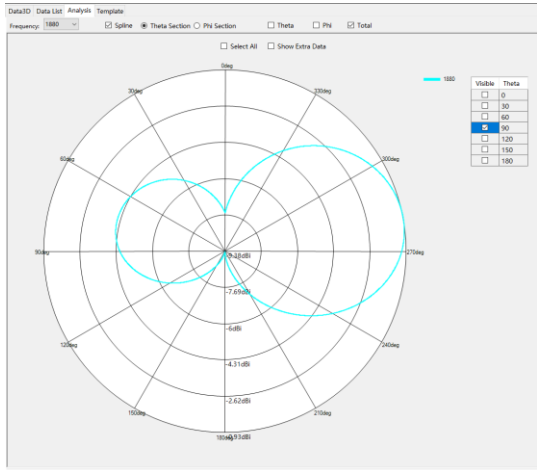
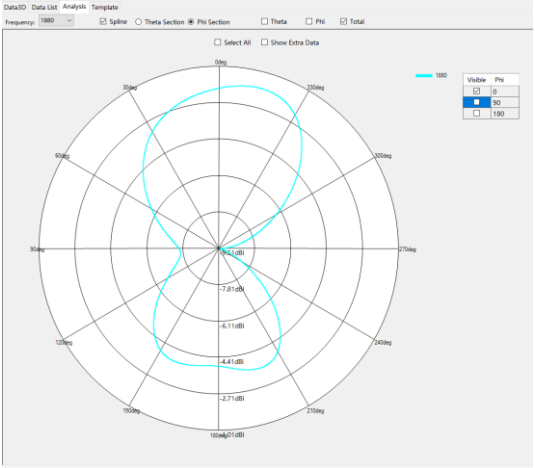
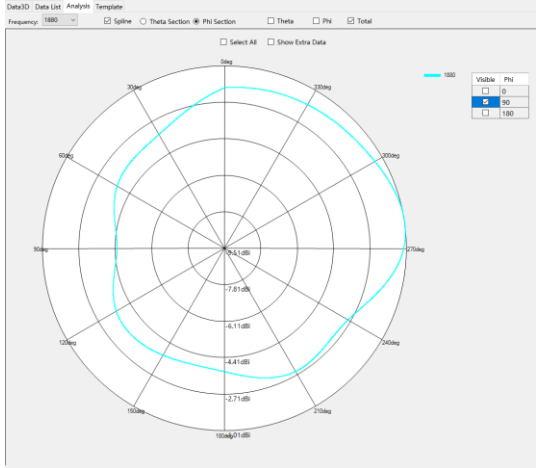
Band	ANT4(dBi)	Band	ANT2(dBi)	Band	ANT3(dBi)
	Average		Average		Average
GSM850	-6.6	LTE B1	-8.2	LTE B40	-5.1
GSM900	-7.5	LTE B2	-10.6	LTE B41	-7.8
GSM1800	-2.7	LTE B3	-11.1	N77	-4.6
GSM1900	-2.9	N77	-4.1	N78	-2.5
WCDMA 1	-5	N78	-5.7		
WCDMA 5	-6.6				
WCDMA 8	-7.5				
LTE B1	-5	Band	ANT5(dBi)	Band	ANT6(dBi)
LTE B2	-2.9		Average		Average
LTE B3	-2.7	B42	2.0	GPS	-1.94
LTE B4	-4.7	N77	0.17	WIFI(2.4G)	-0.34
LTE B5	-6.6	N78	1.7	WIFI(5G)	-0.73
LTE B7	-0.73				
LTE B8	-7.5				
LTE B12	-8.2				
LTE B17	-8.2				
LTE B20	-8.2				
LTE B28	-8.2				
LTE B38	-0.14				
LTE B40	-1.6				
LTE B66	-5.1				
LTE B41	-0.2				
N1	-5				
N3	-2.7				
N5	-6.6				
N7	0.73				
N8	-7.5				
N12	-8.2				
N20	-8.2				
N28	-8.2				
N66	-5.1				
N38	-0.14				
N40	-1.6				
N41	-0.2				

ANT0

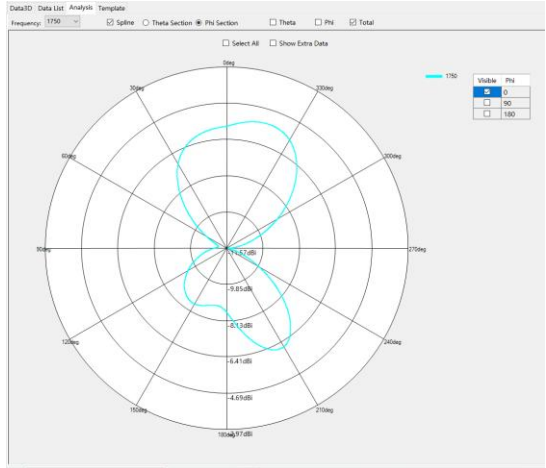
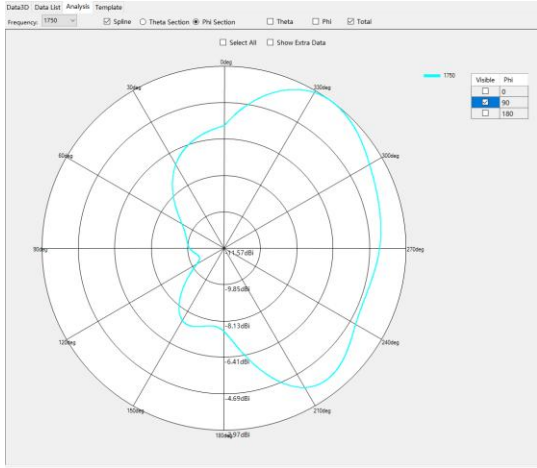
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B1/W1/N1	-1.9

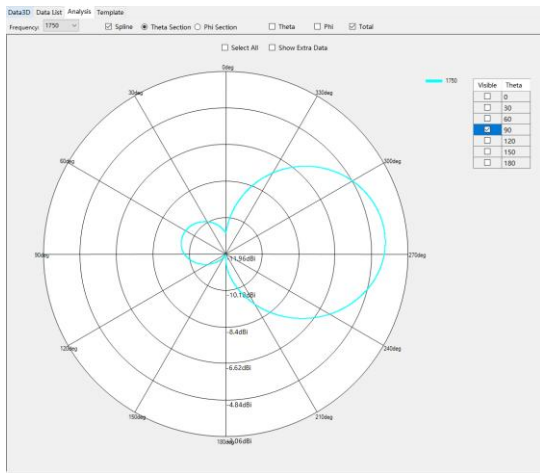


Frequency band	Gain
B2/W2	-1.2

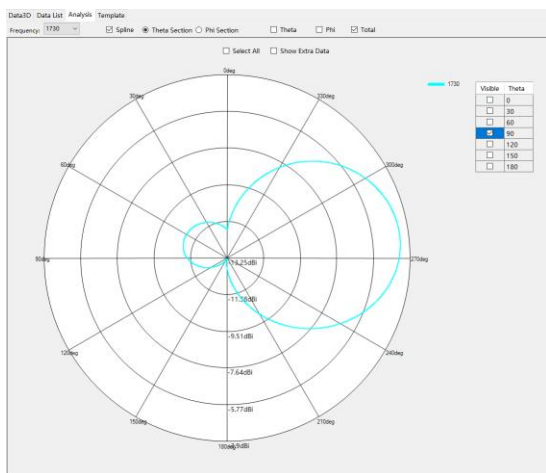
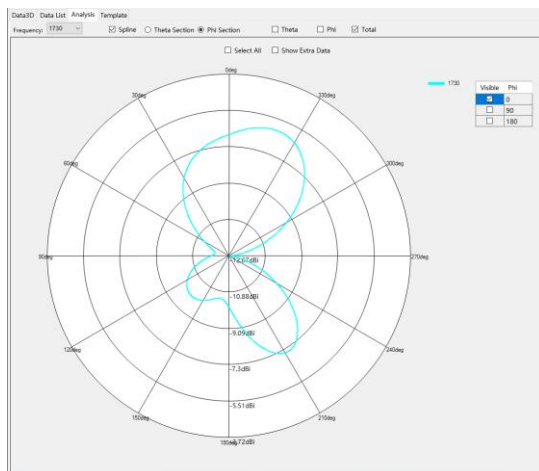
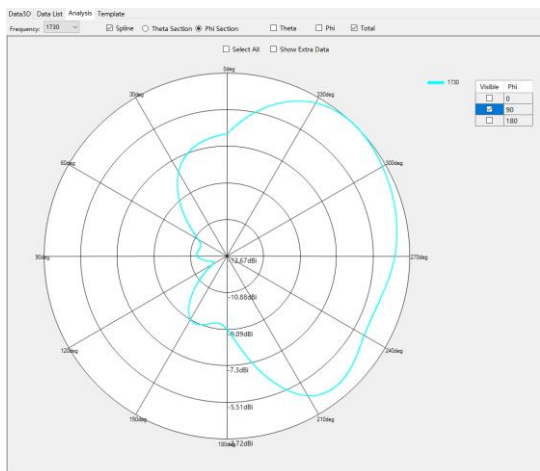


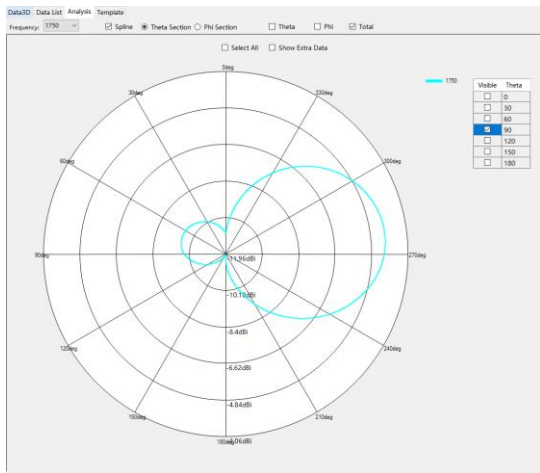
Frequency band	Gain
B3/W3/N3	-3.1



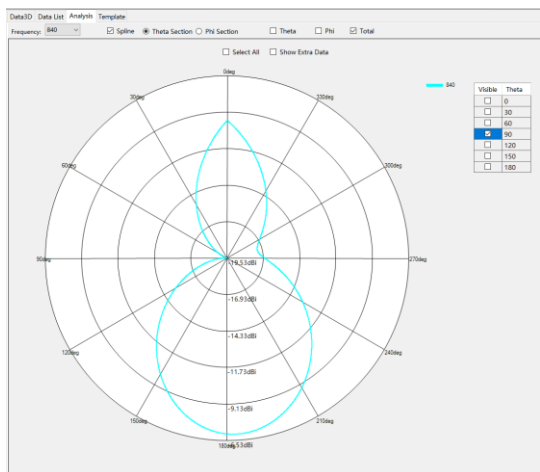
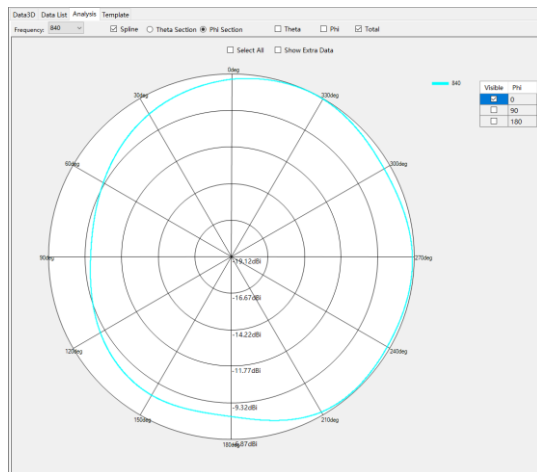
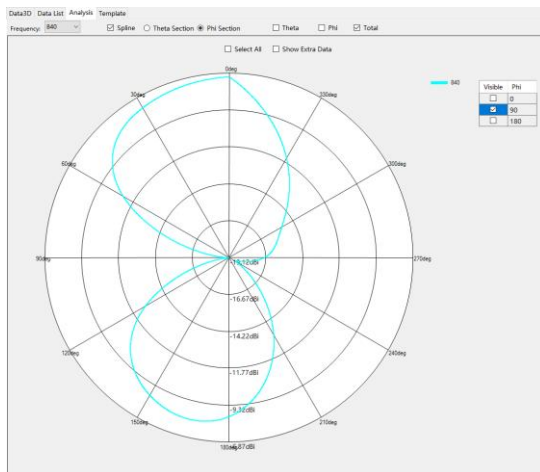


Frequency band	Gain
B4/W4	-3.7

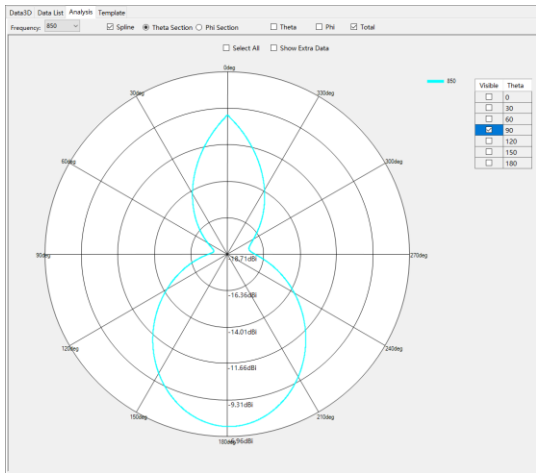
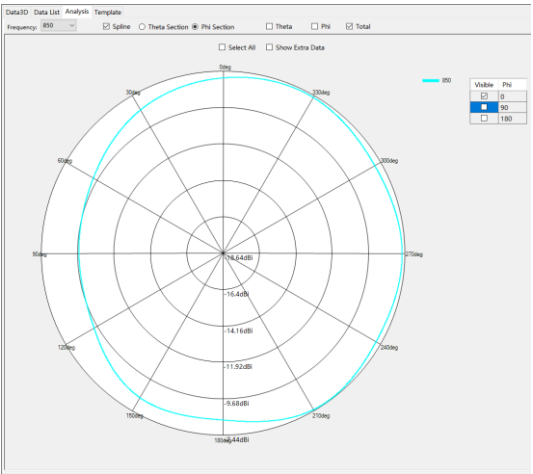
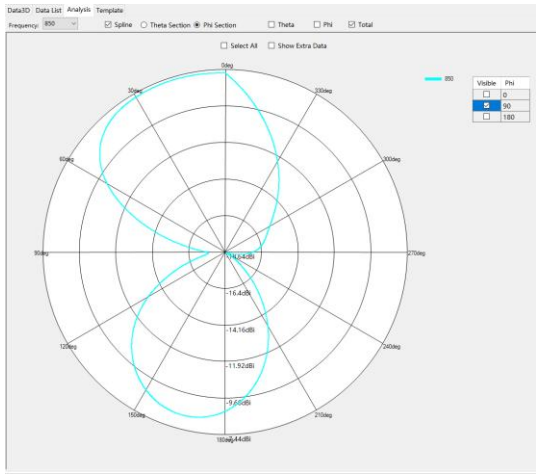




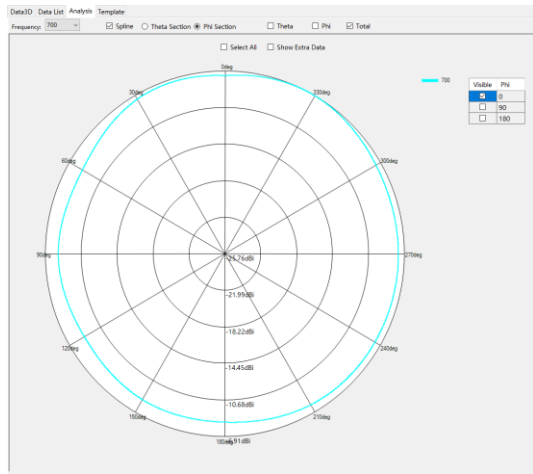
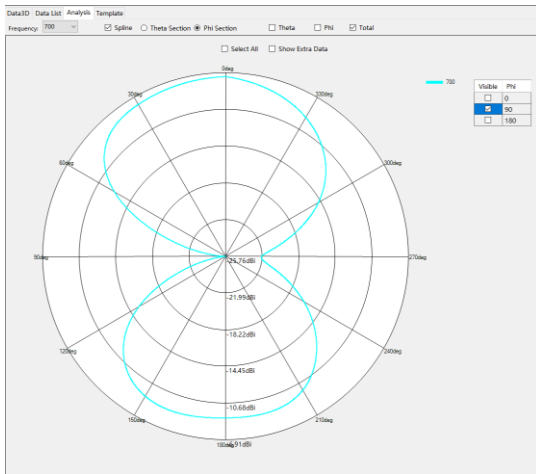
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B5/W5/N5	-7.2

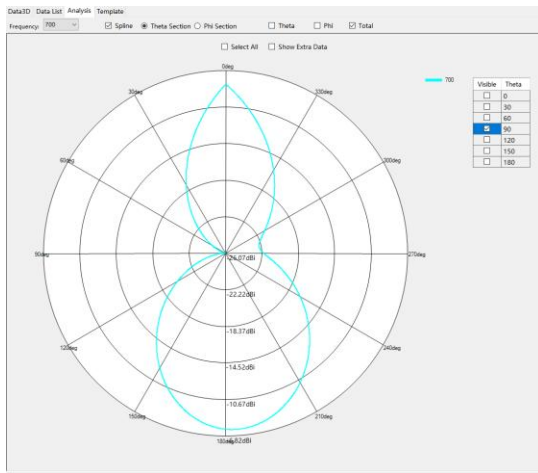


Frequency band	Gain
B20/N20	-7.8

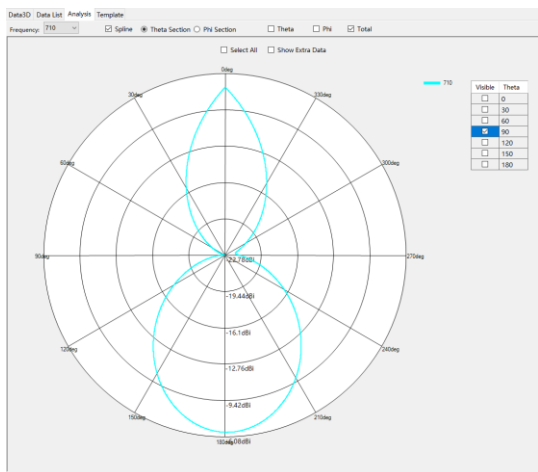
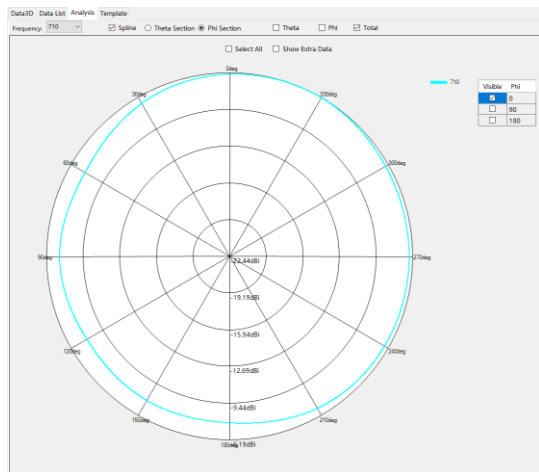
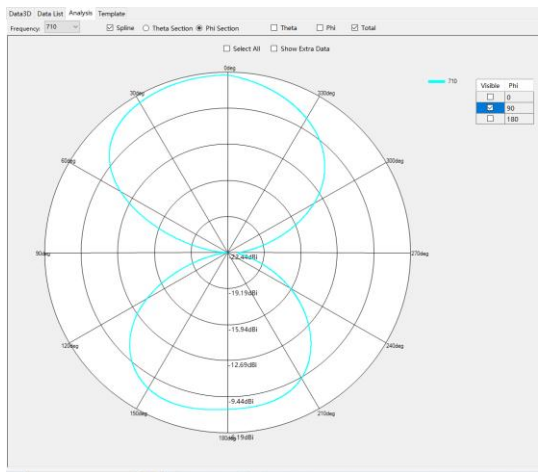


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B12/N12	-6.3

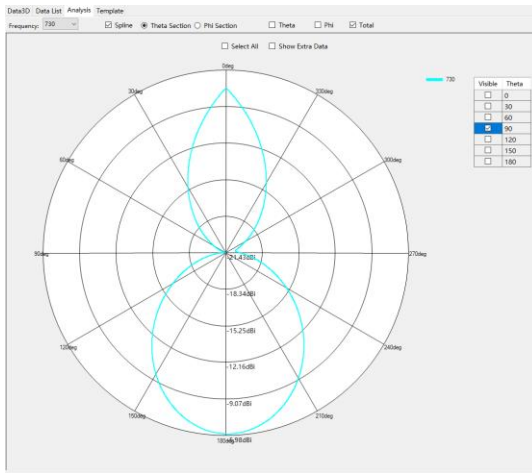
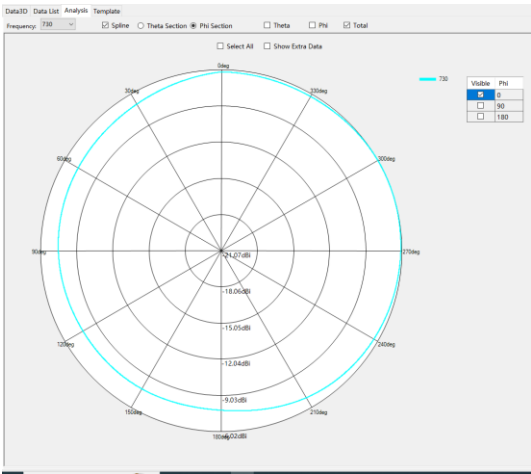
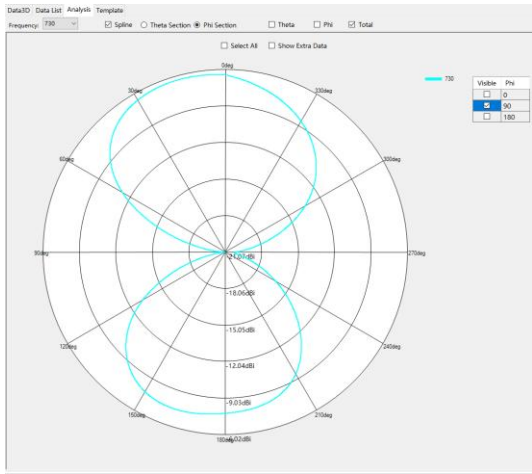




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B17	-6.3

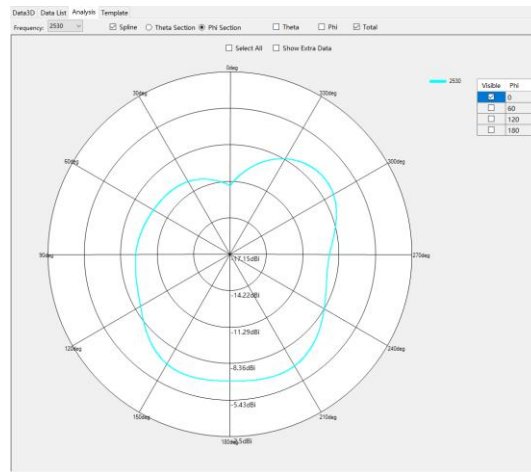
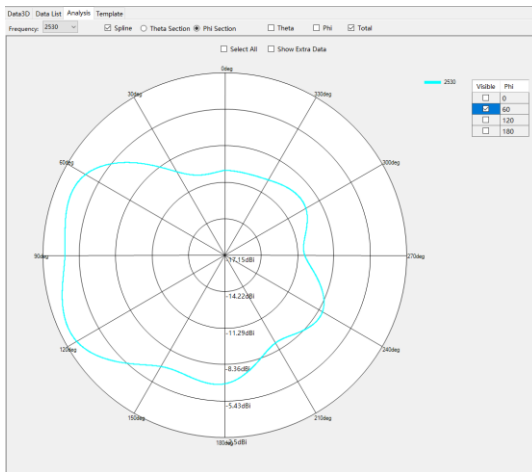


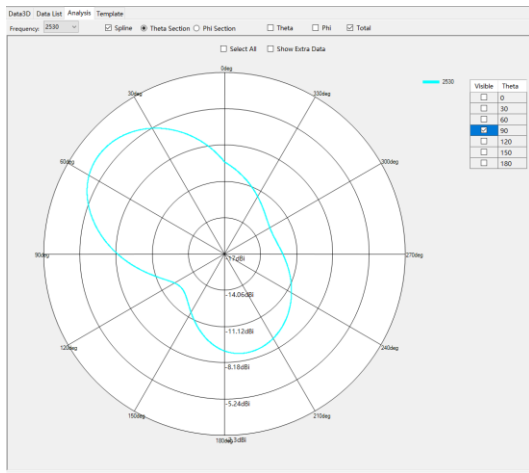
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B28/N28	-6.4



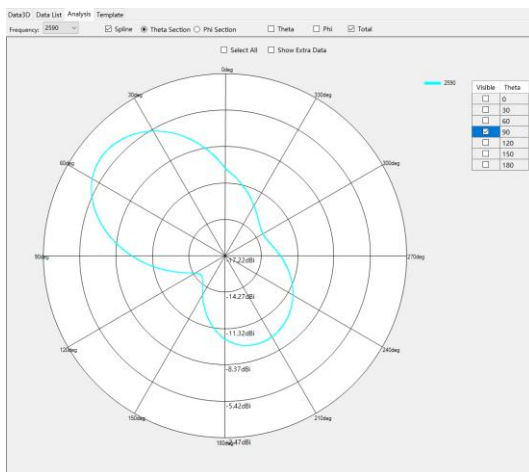
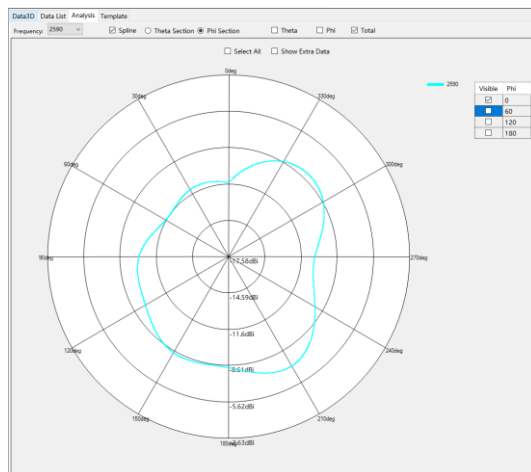
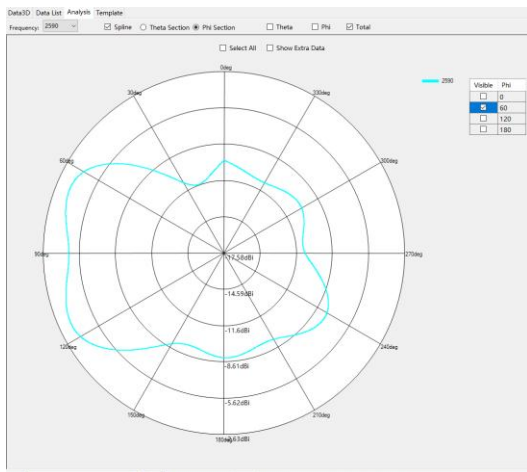
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Frequency band	Gain
B7/N7	-3.2

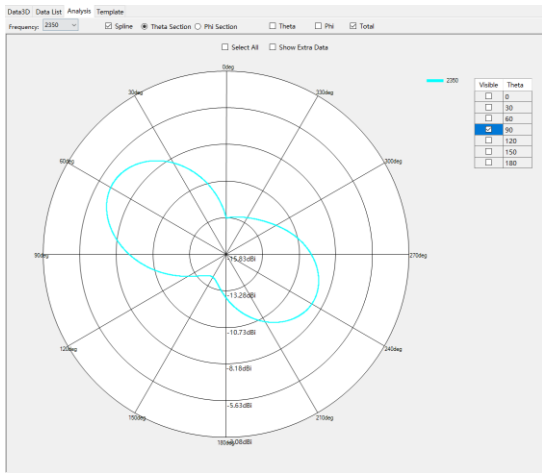
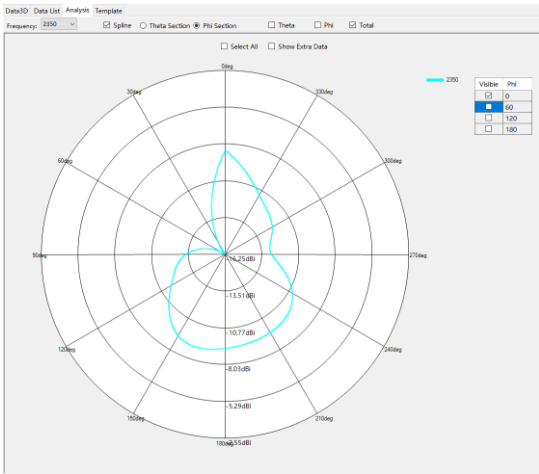
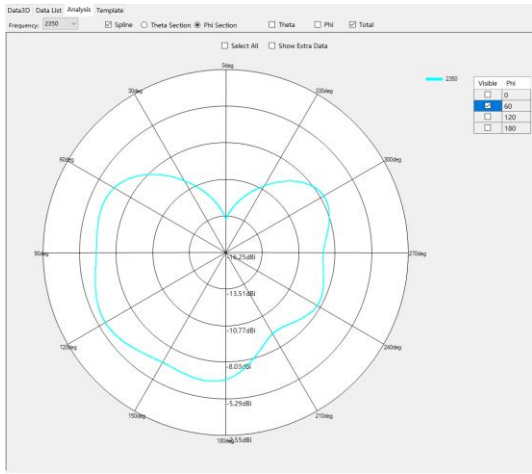




Frequency band	Gain
B38/N38	-3.2

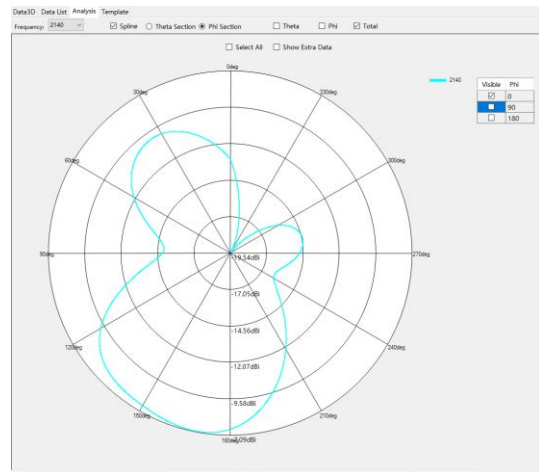
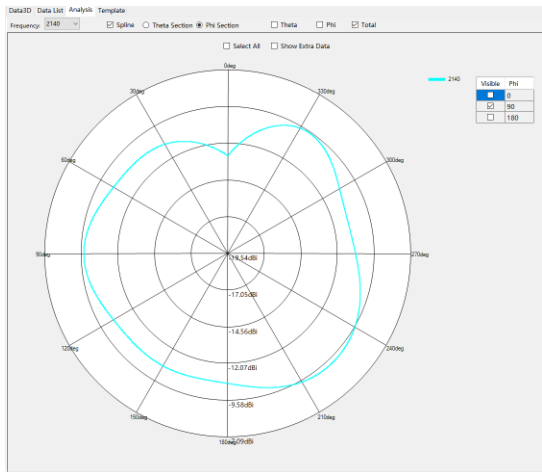


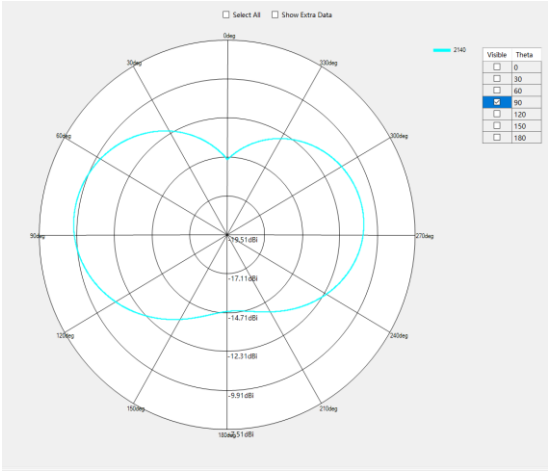
Frequency band	Gain
B40/N40	-3.9



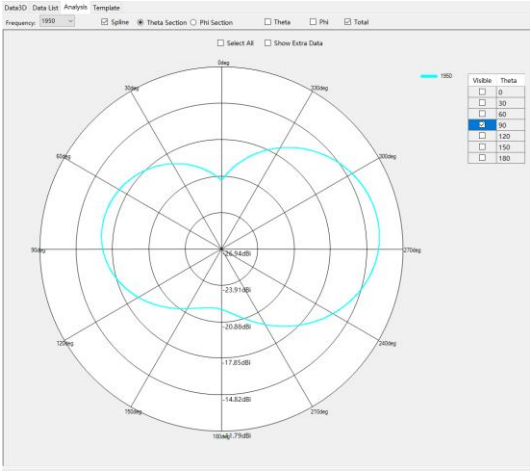
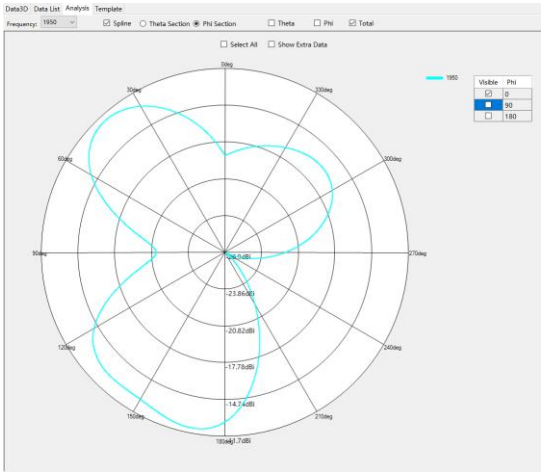
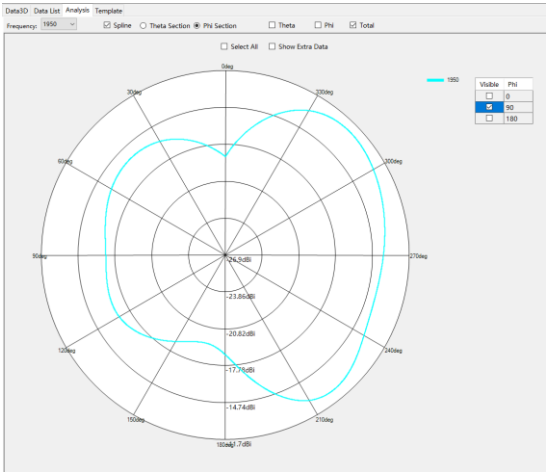
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Frequency band	Gain
B1/W1/N1	-7.7

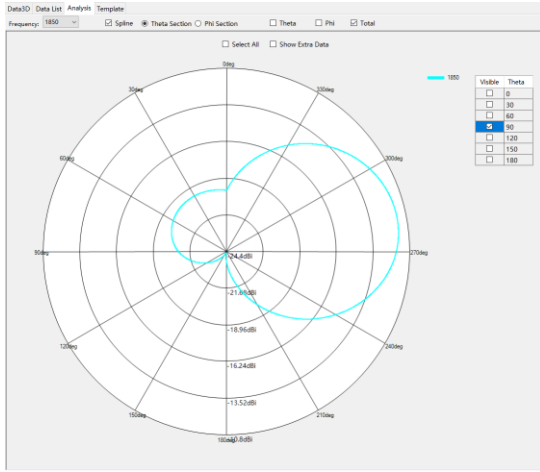
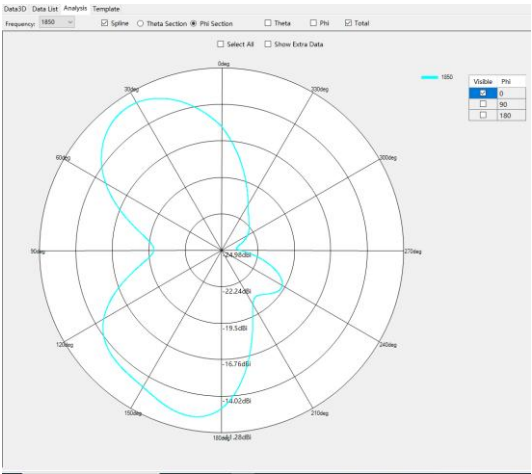
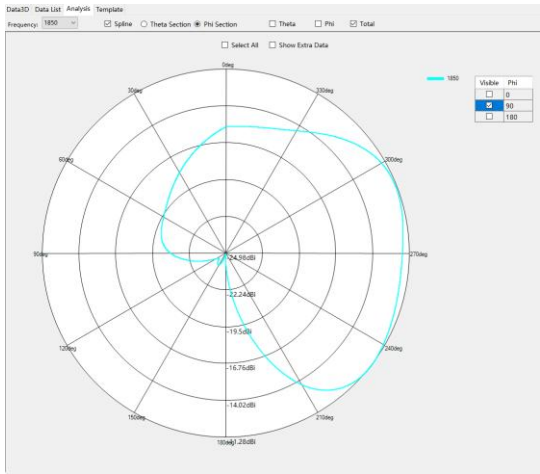




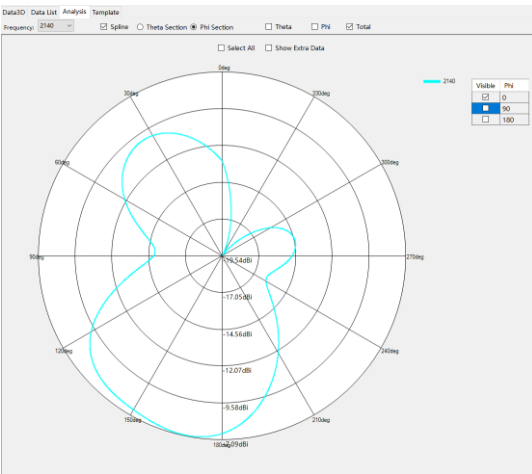
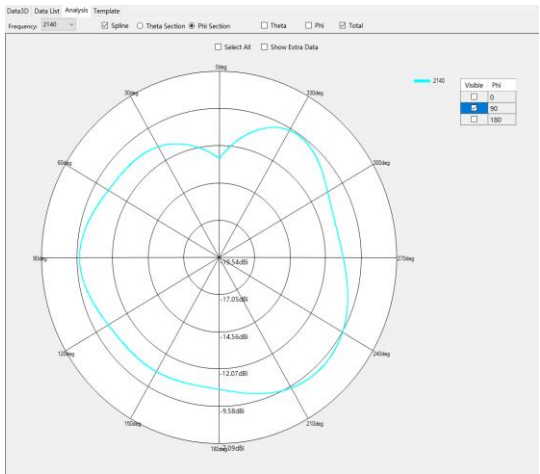
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B2/W2	-12.1

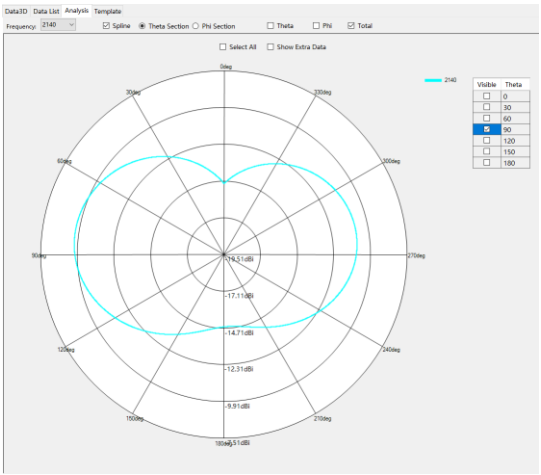


Frequency band	Gain
B3/W3/N3	-11.8

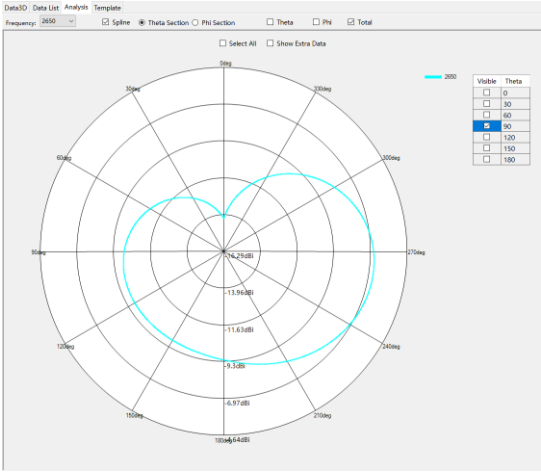
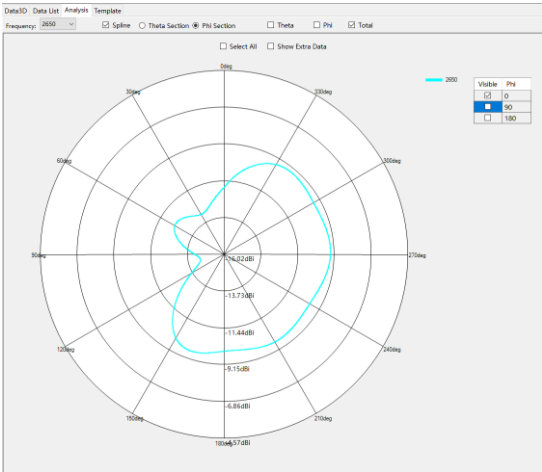
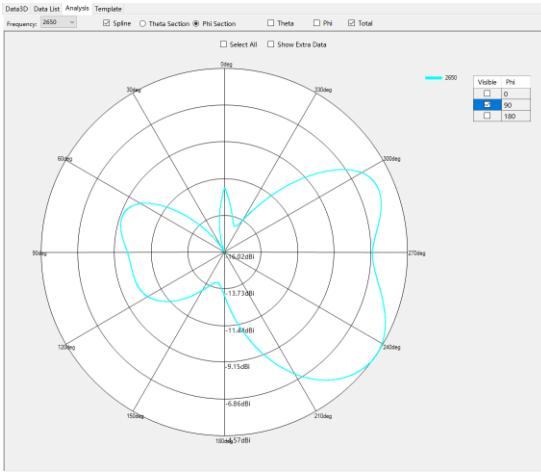


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B4/W4	-7.6

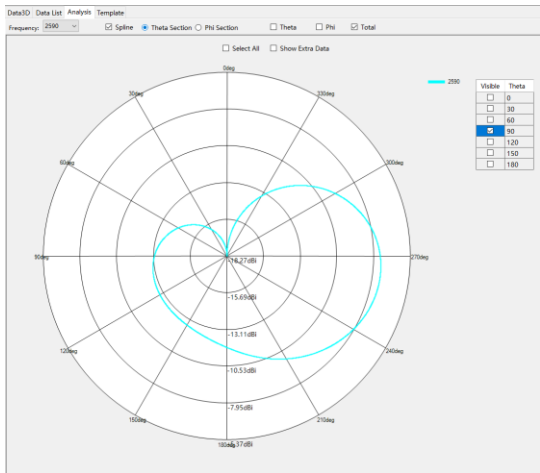
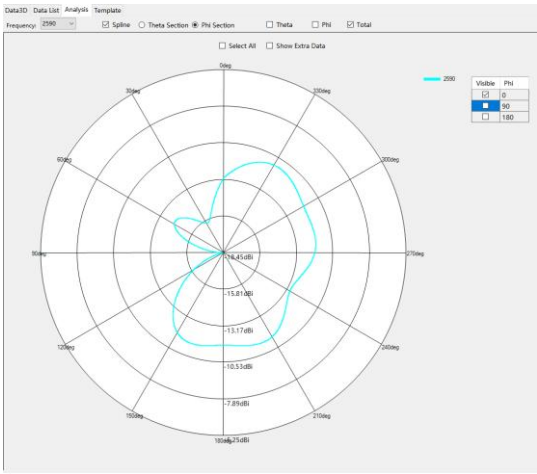
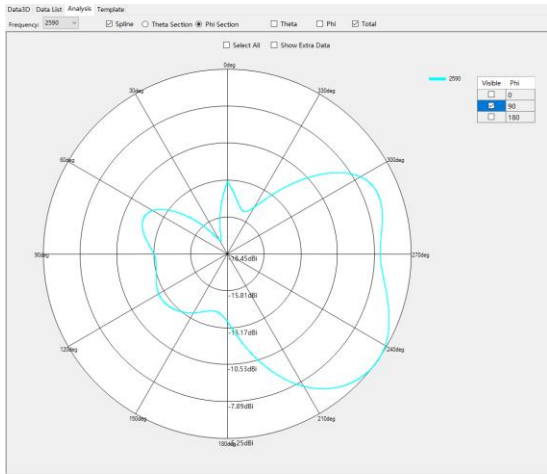




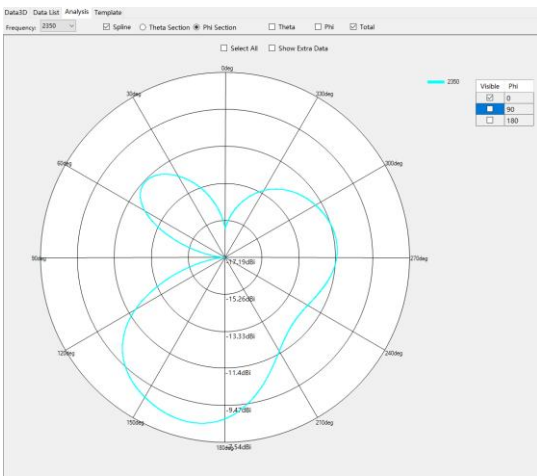
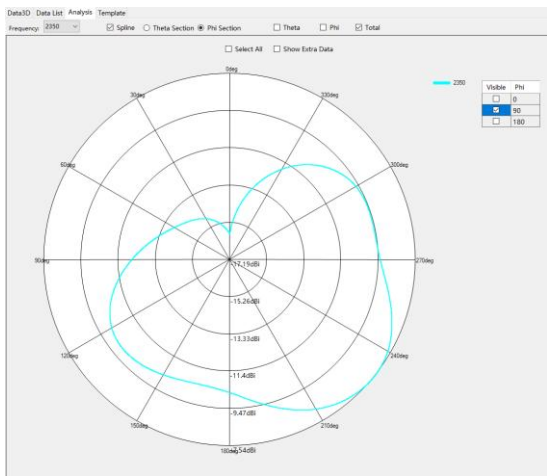
Frequency band	Gain
B7/N7	-4.8

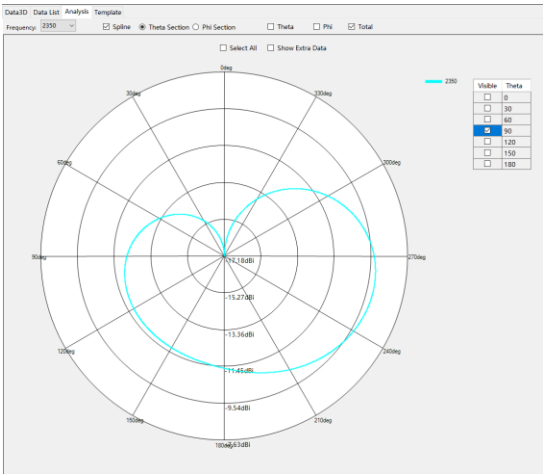


Frequency band	Gain
B38/N38	-5.4

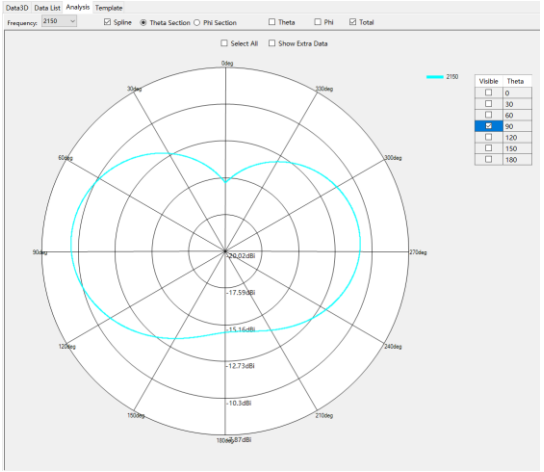
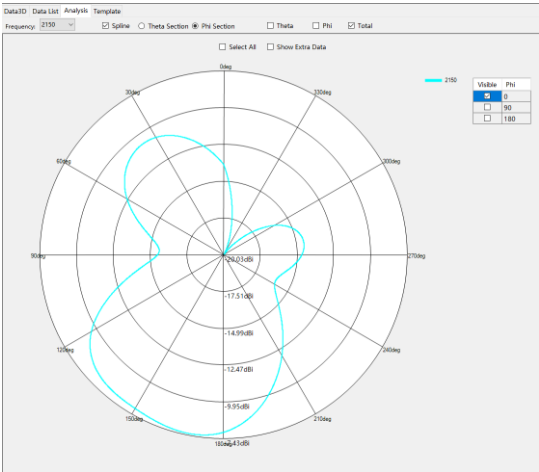
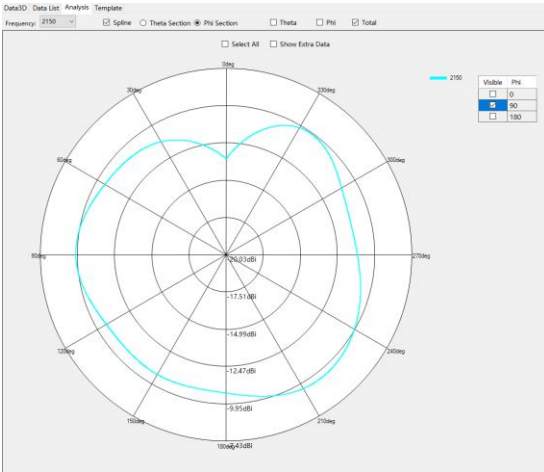


Frequency band	Gain
B40/N40	-7.8



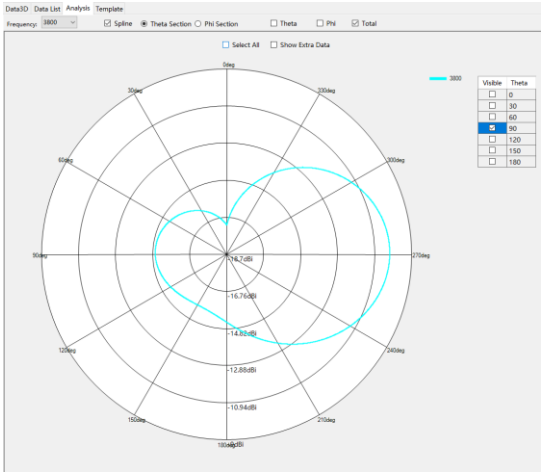
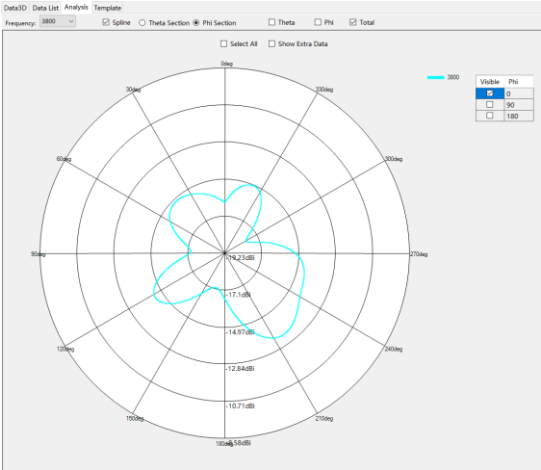
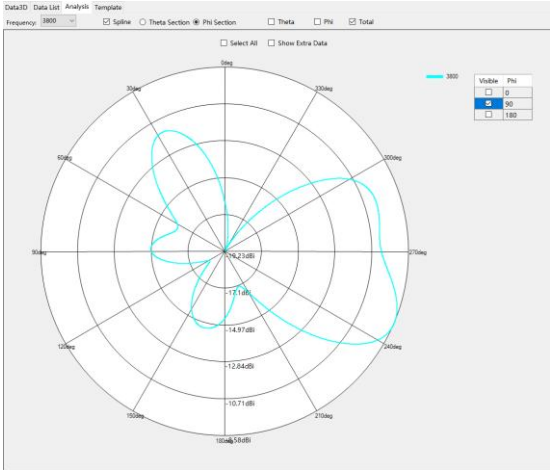


Frequency band	Gain
B66/N66	-8

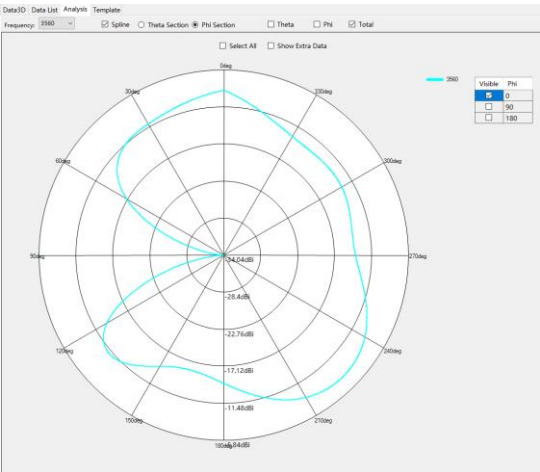
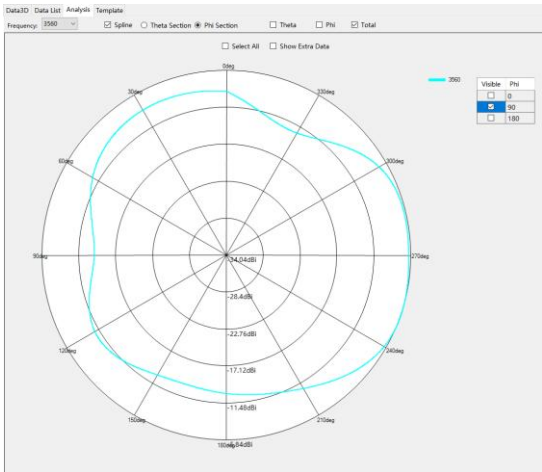


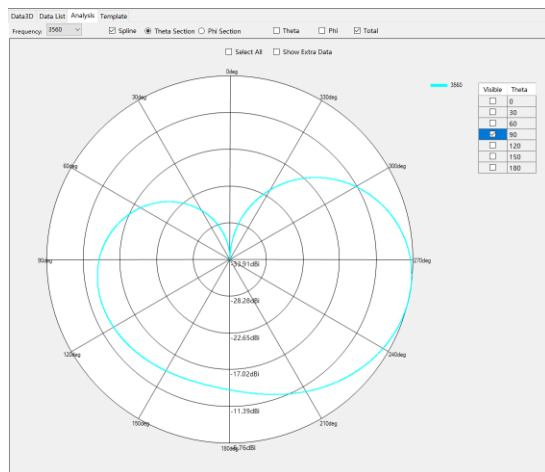
ANT8

Frequency band	Gain
N77	-13.8



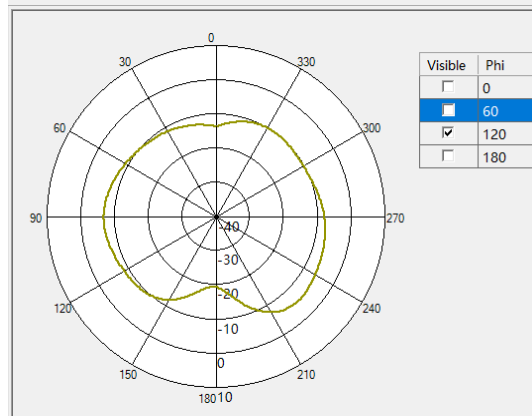
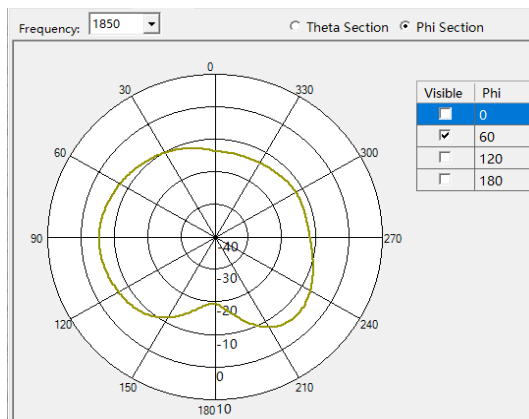
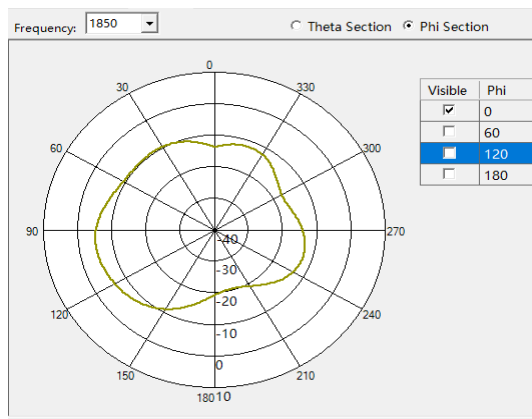
Frequency band	Gain
N78	-12.7



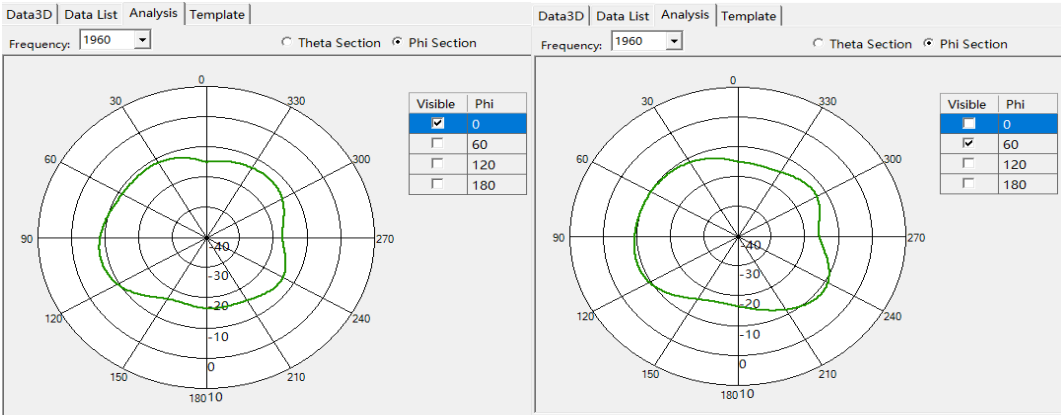


ANT2

Frequency band	Gain
B3	-11.1



Frequency band	Gain
B2	-10

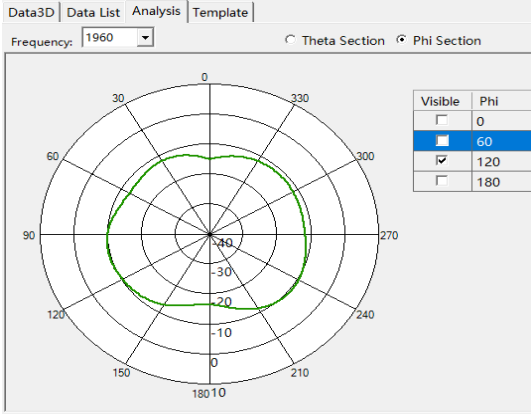


Data3D | Data List | Analysis | Template

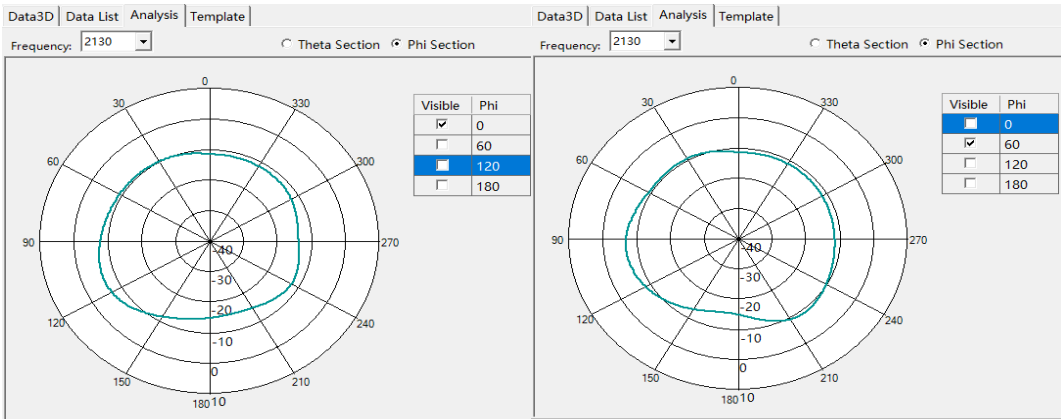
Frequency: 1960

☐ Theta Section
 ☒ Phi Section

Visible	Phi
☐	0
☒	60
☐	120
☐	180



Frequency band	Gain
B1	-8.2

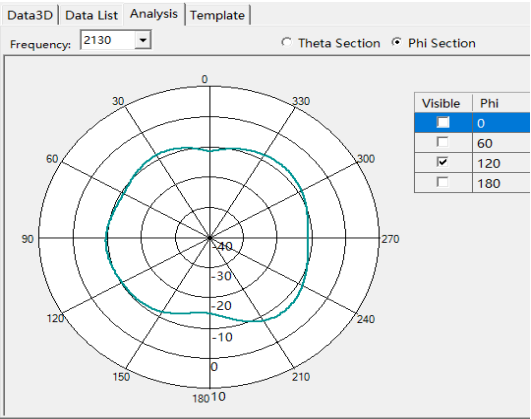


Data3D | Data List | Analysis | Template

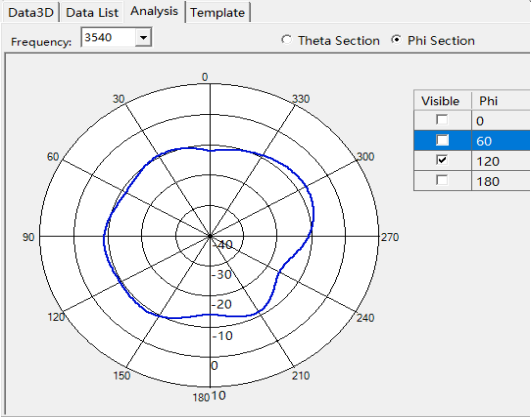
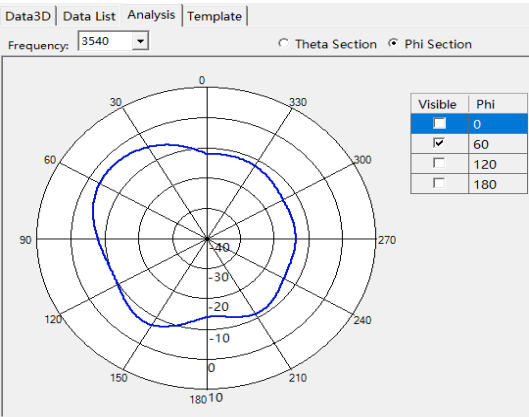
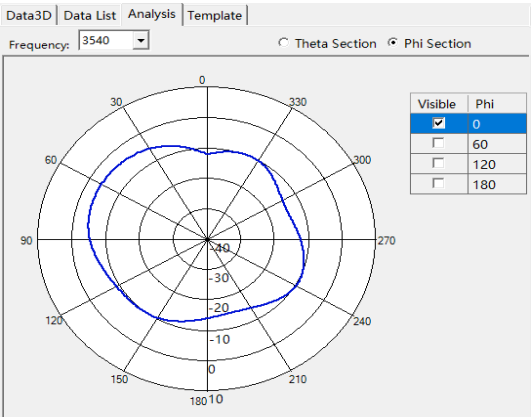
Frequency: 2130

☐ Theta Section
 ☒ Phi Section

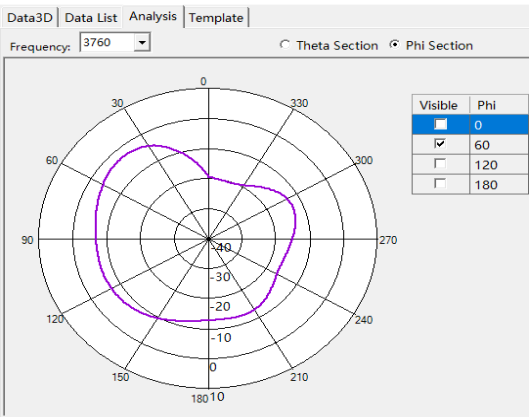
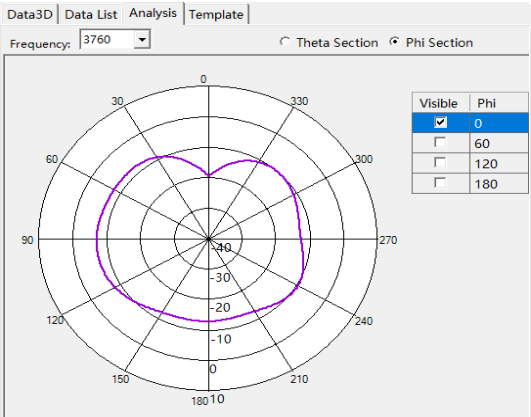
Visible	Phi
☒	0
☒	60
☐	120
☐	180

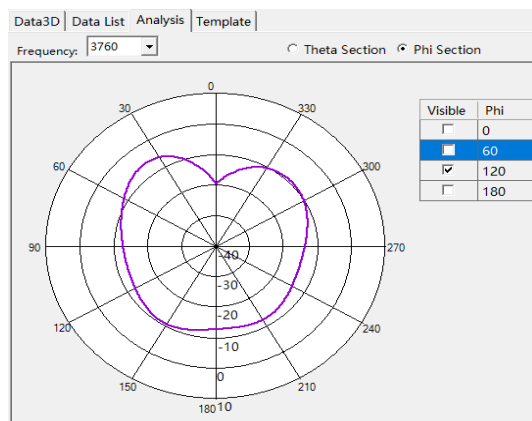


Frequency band	Gain
N78	-4.1



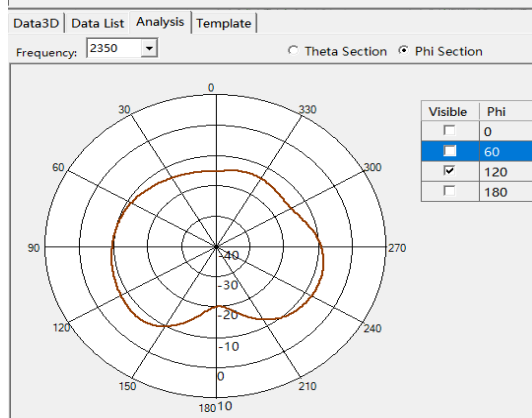
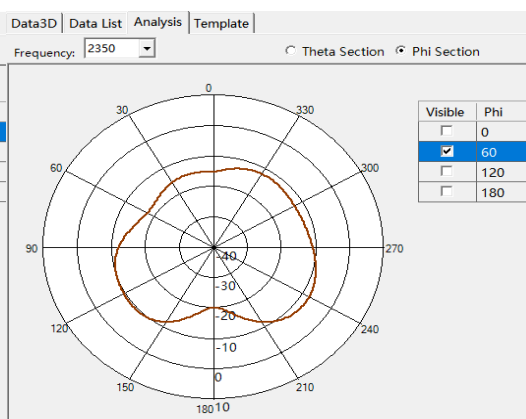
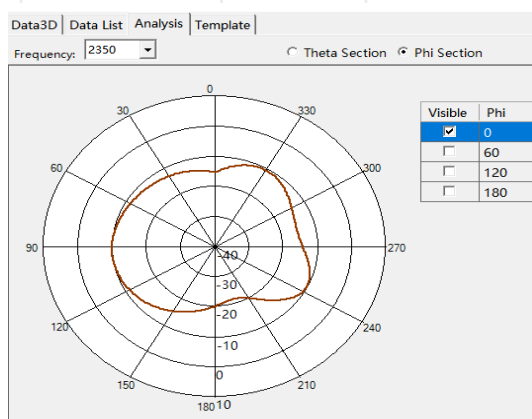
Frequency band	Gain
N77	-5.7



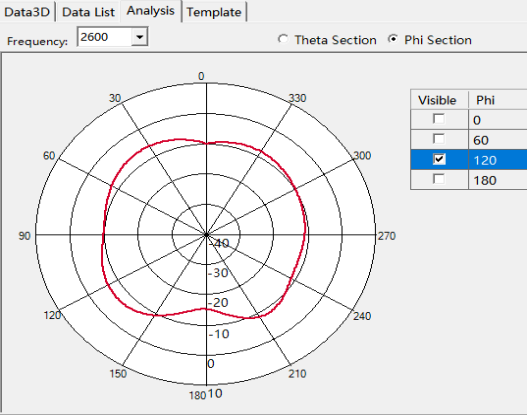
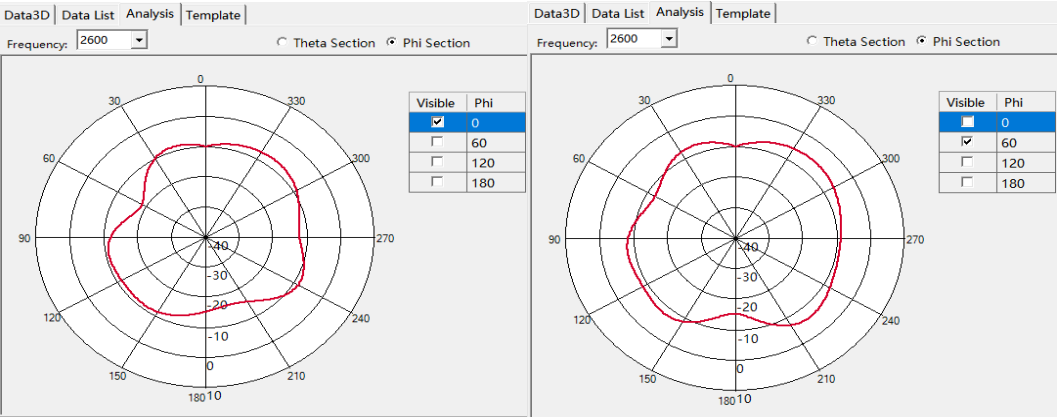


ANT3

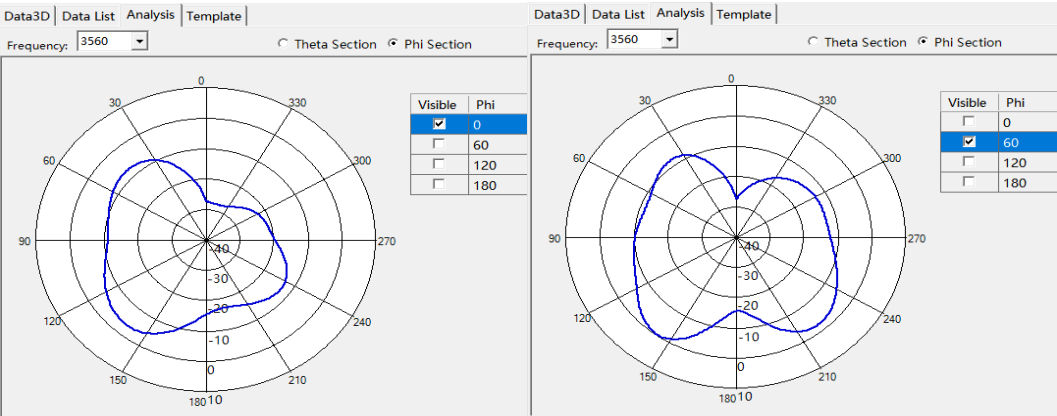
Frequency band	Gain
B40	-5.1

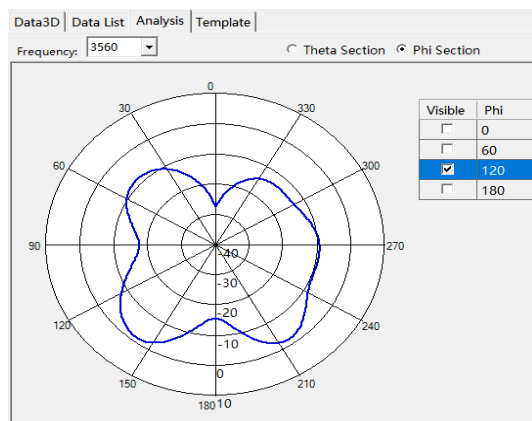


Frequency band	Gain
B41	-7.8

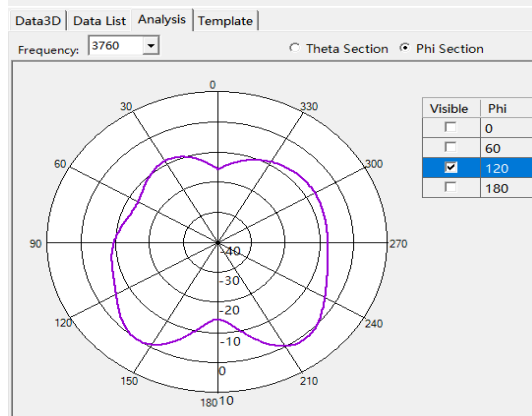
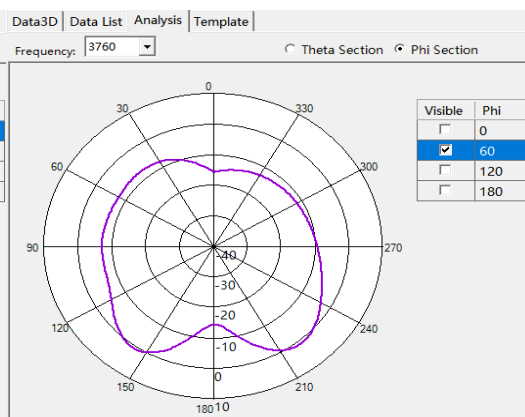
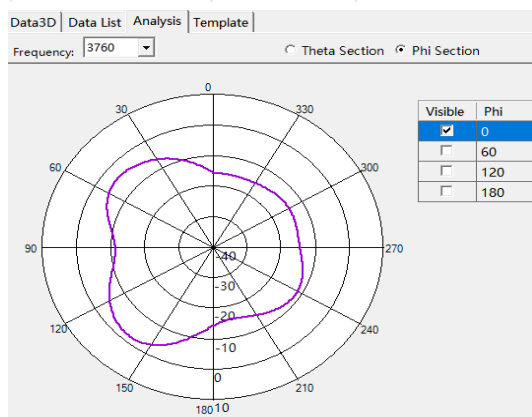


Frequency band	Gain
N78	-2.5



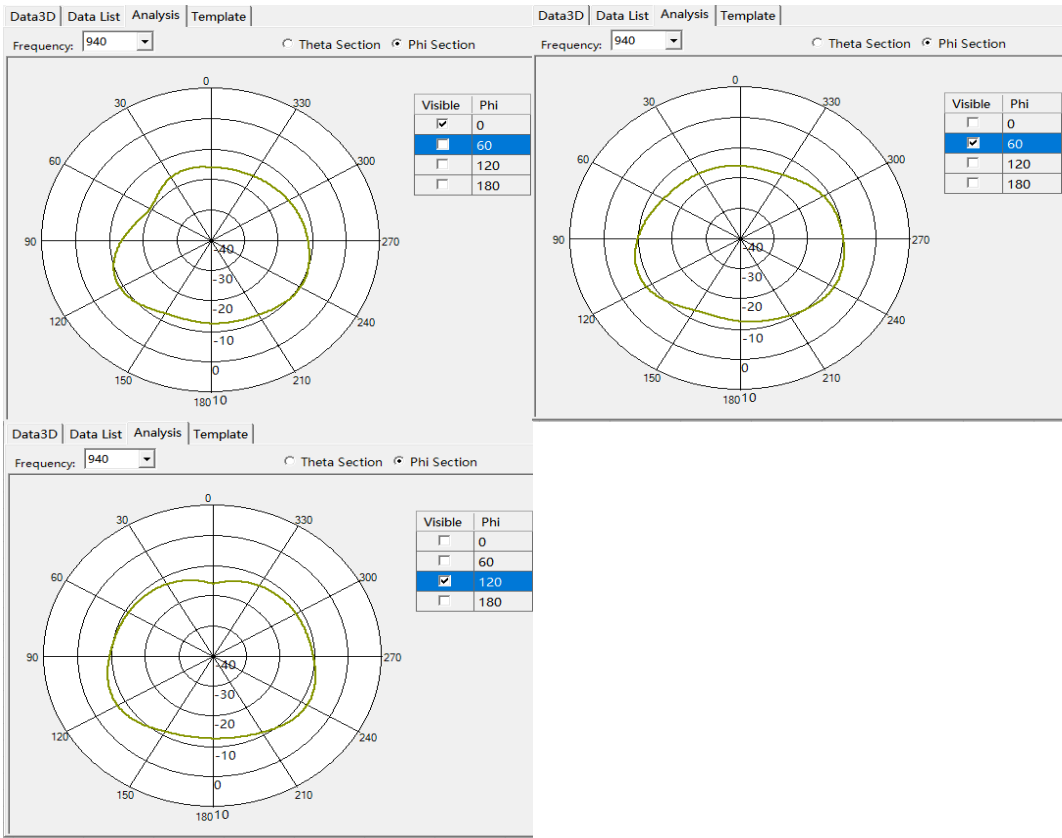


Frequency band	Gain
N77	-4.6

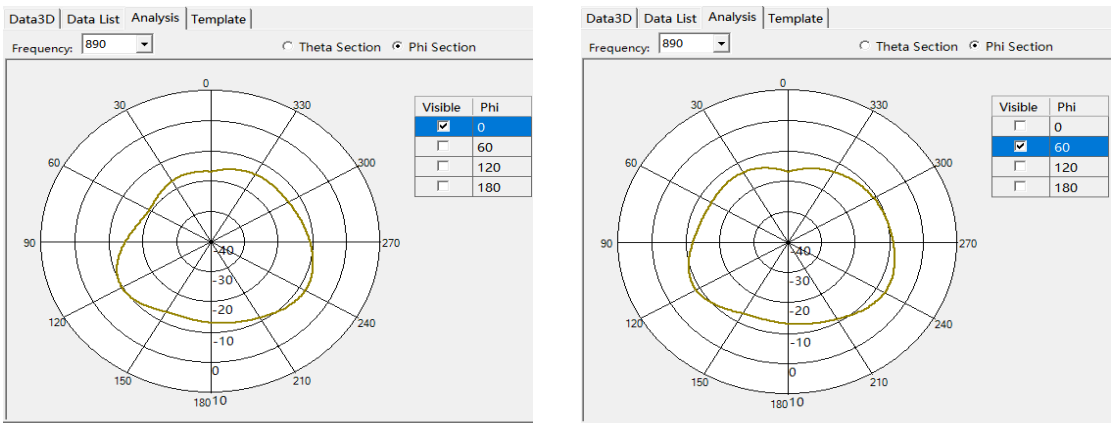


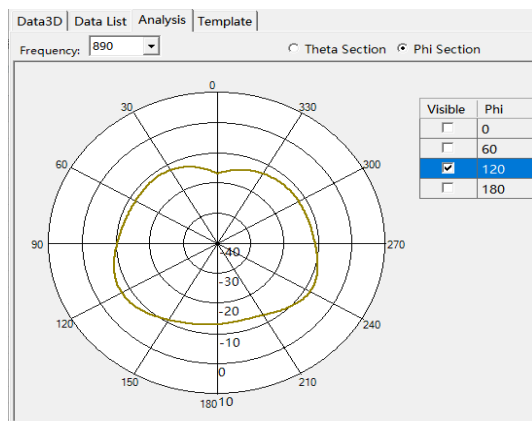
ANT4

Frequency band	Gain
B8	-7.5

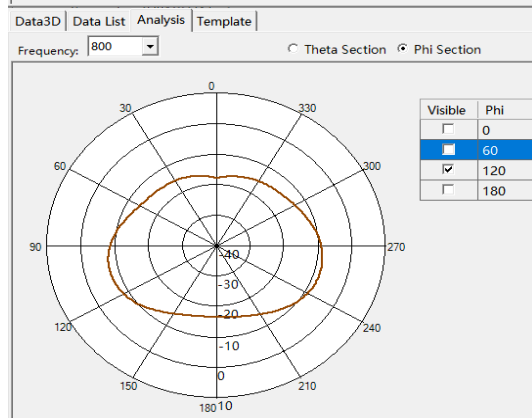
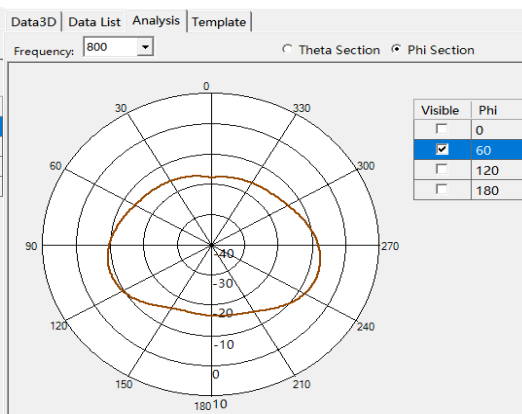
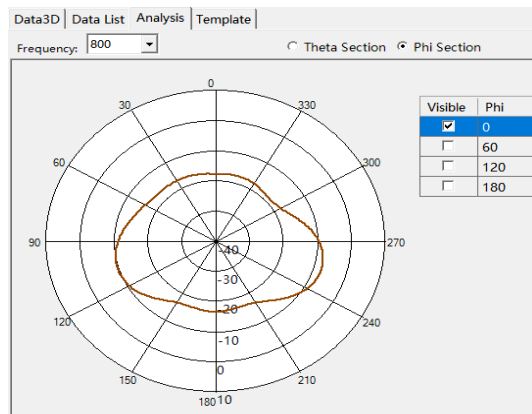


Frequency band	Gain
B5	-6.6

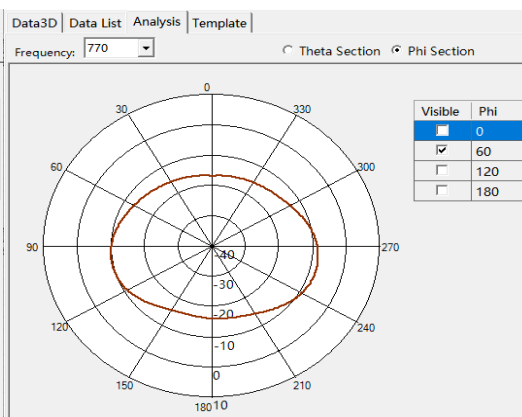
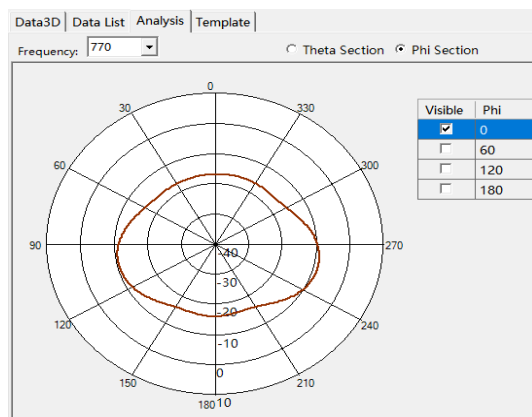


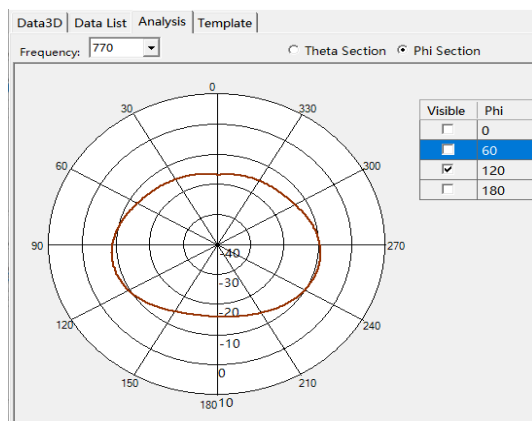


Frequency band	Gain
B20	-0.8

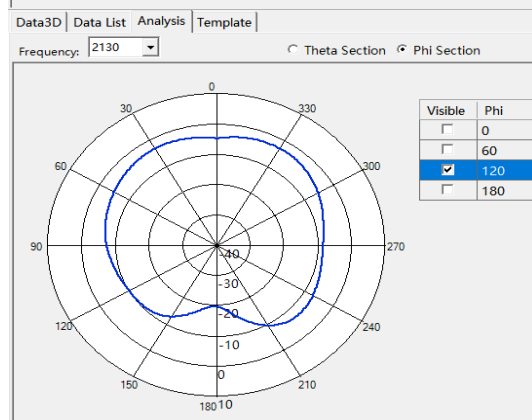
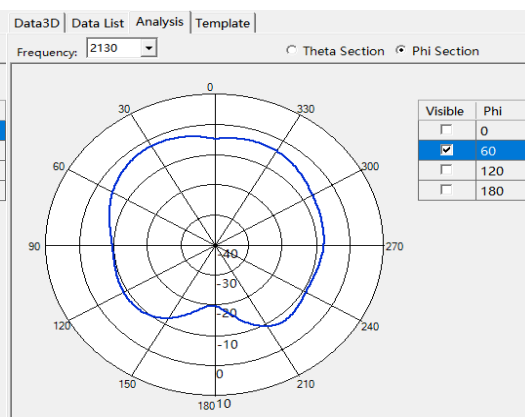
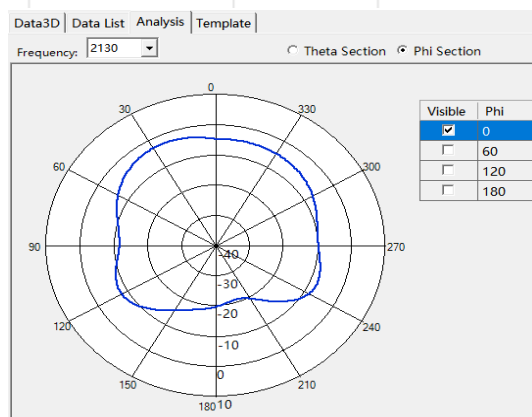


Frequency band	Gain
B28	-8

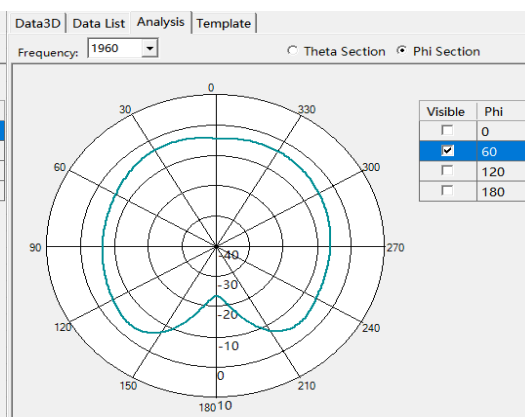
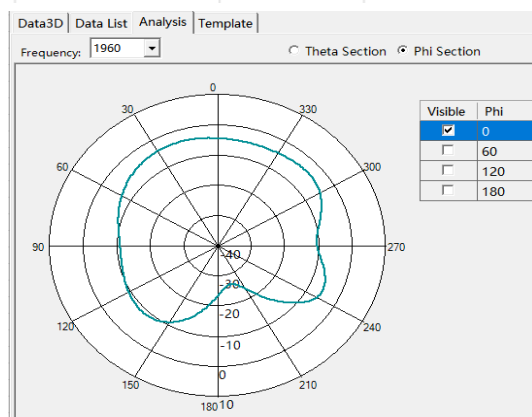


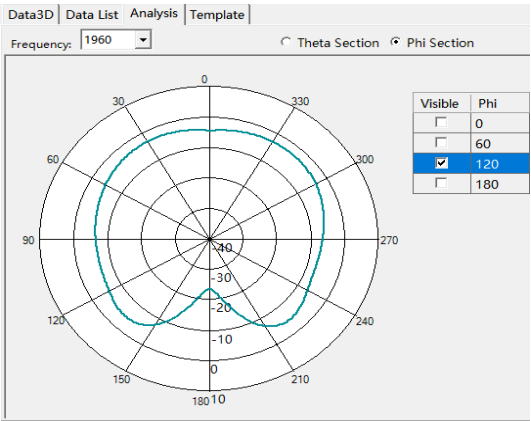


Frequency band	Gain
B1	-5

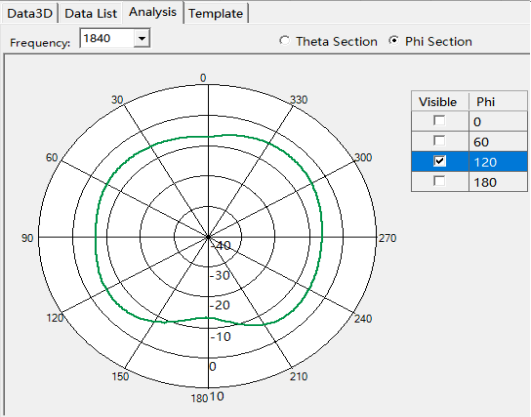
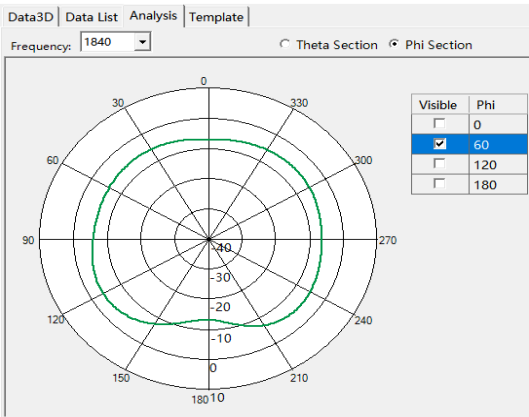
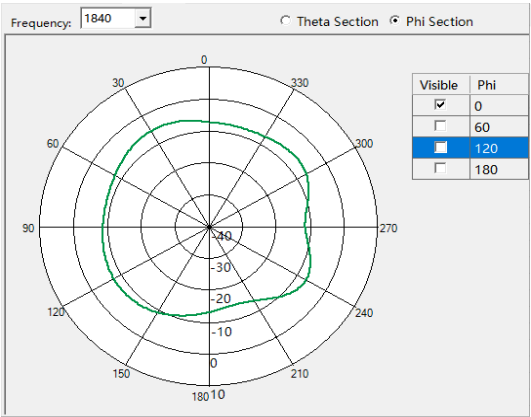


Frequency band	Gain
B2	-2.9

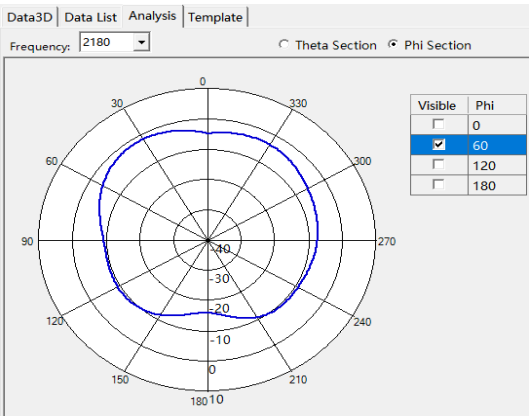
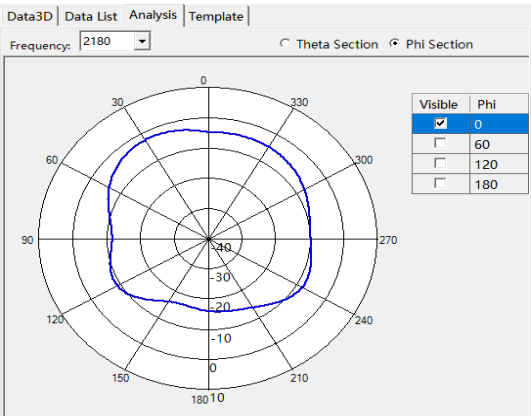


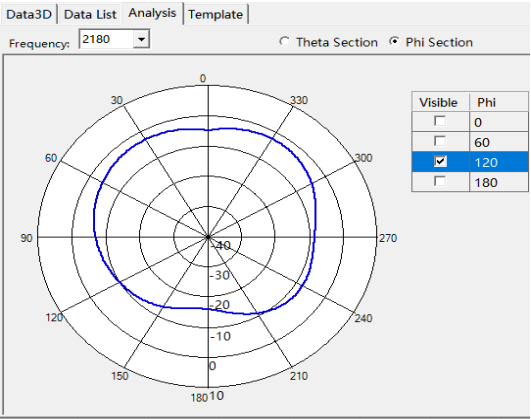


Frequency band	Gain
B3	-2.7

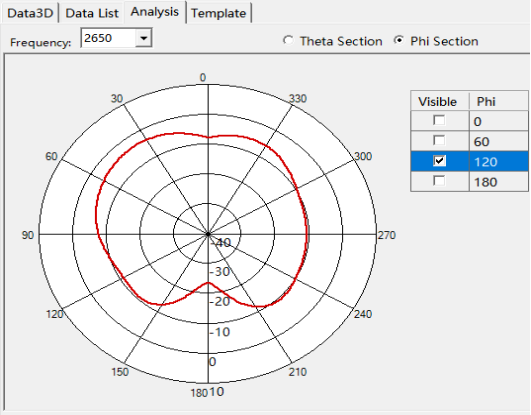
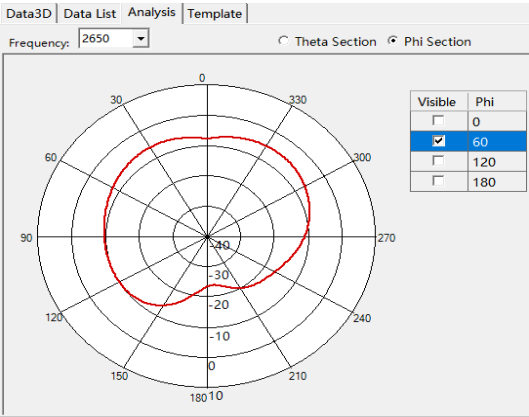
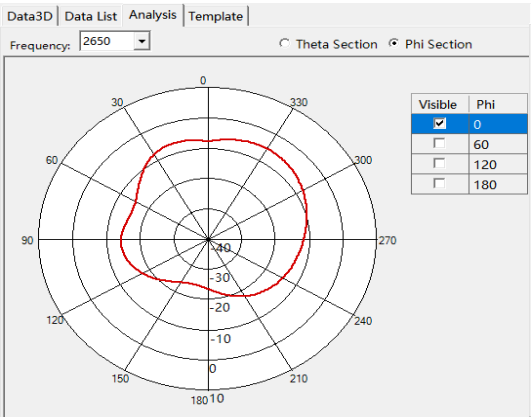


Frequency band	Gain
B4	-4.7

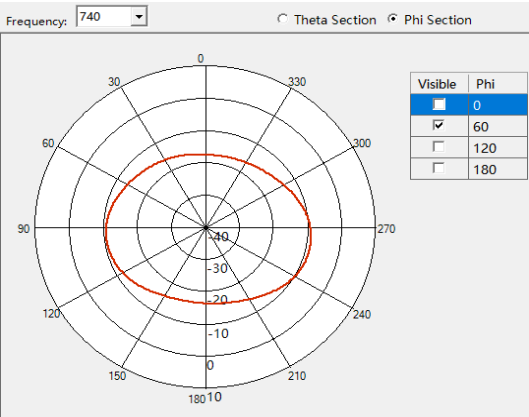
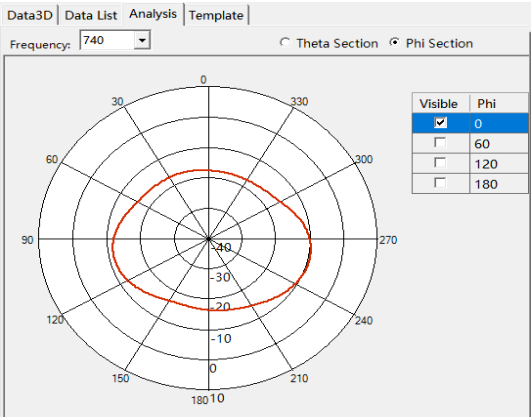


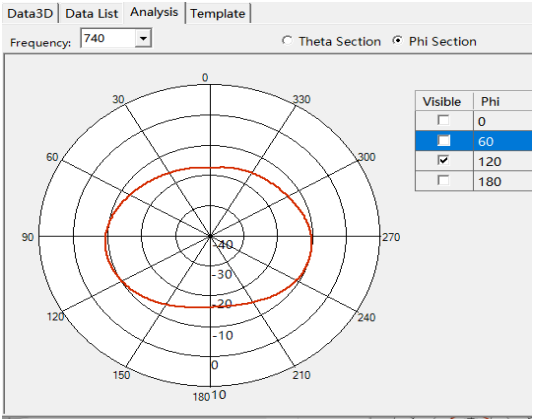


Frequency band	Gain
B7	-0.73

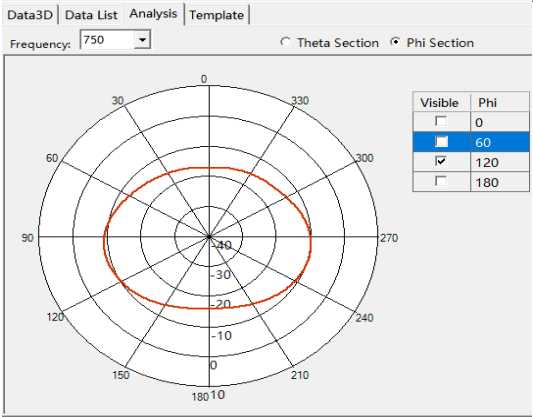
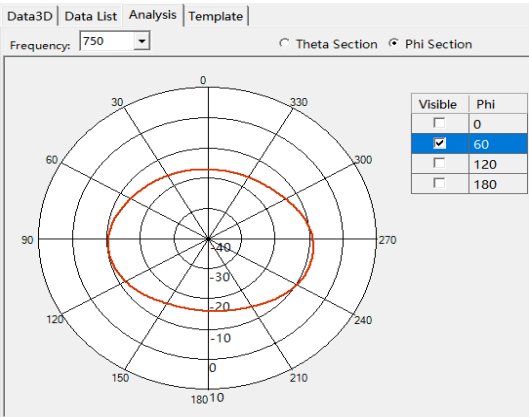
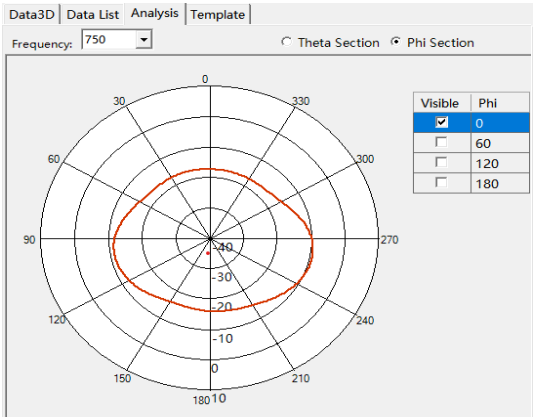


Frequency band	Gain
B12	-8.2

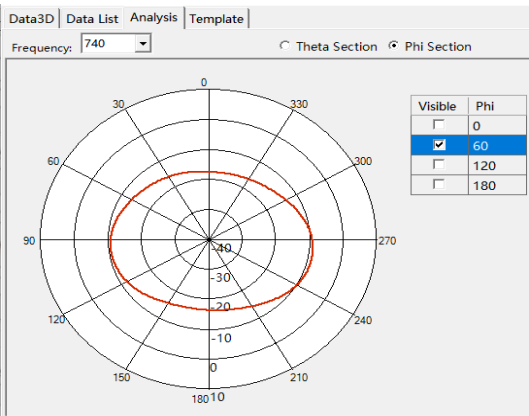
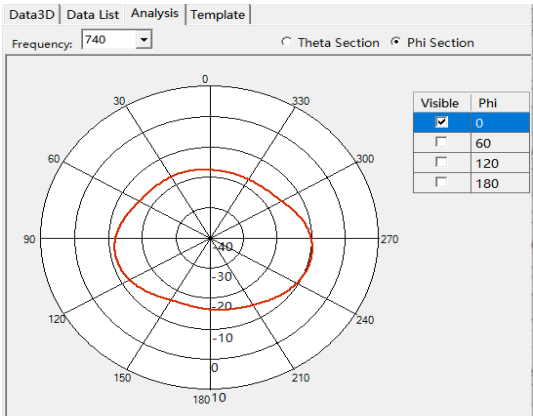


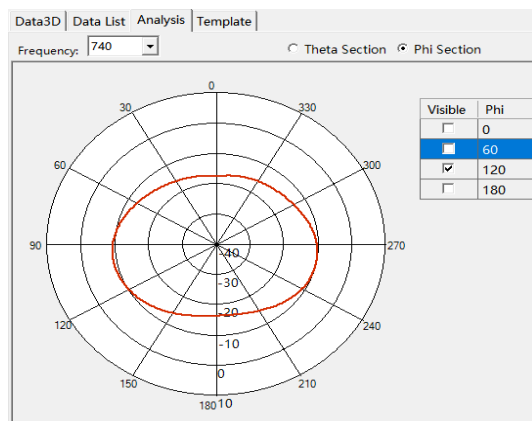


Frequency band	Gain
B13	-8.2

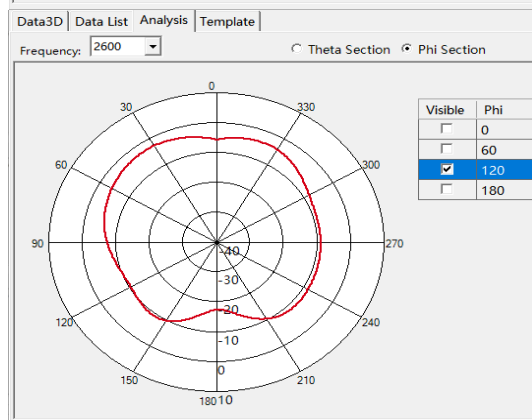
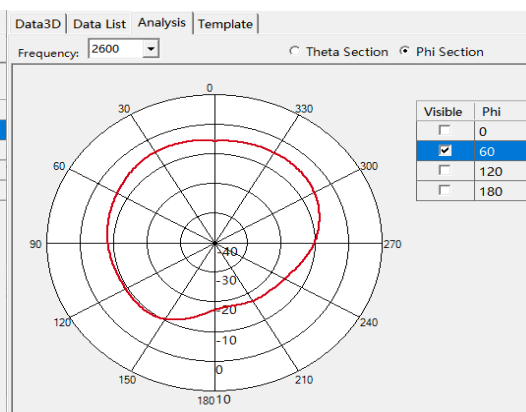
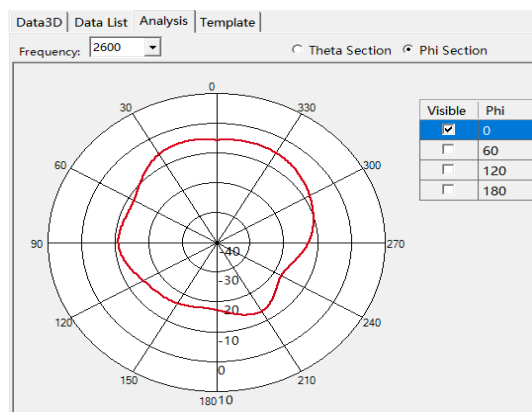


Frequency band	Gain
B17	-8.2

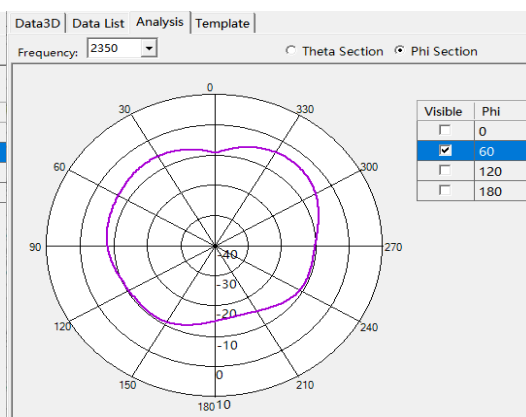
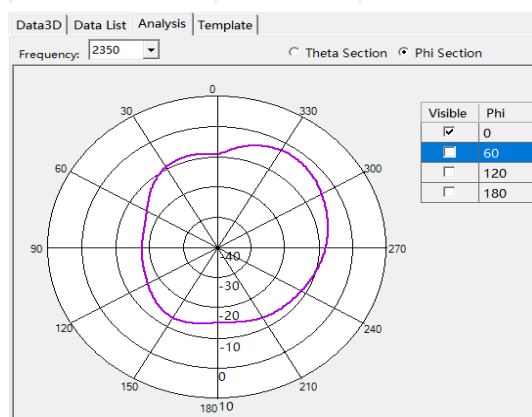


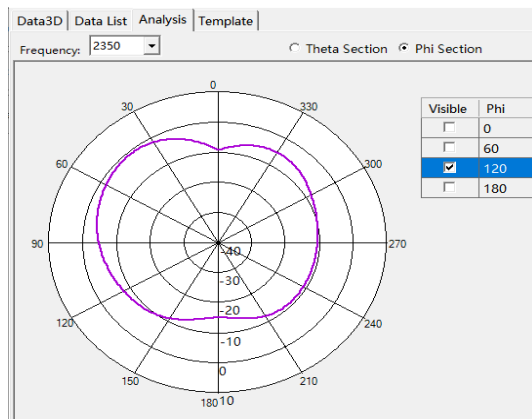


Frequency band	Gain
B38	-0.14

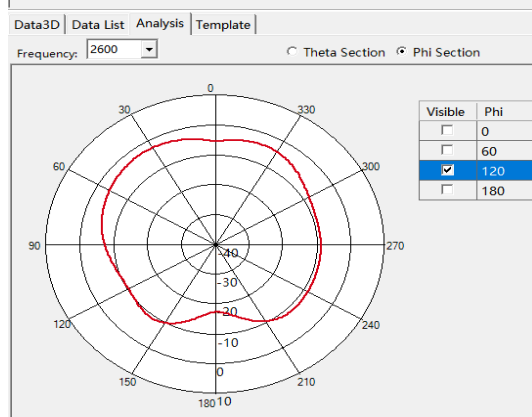
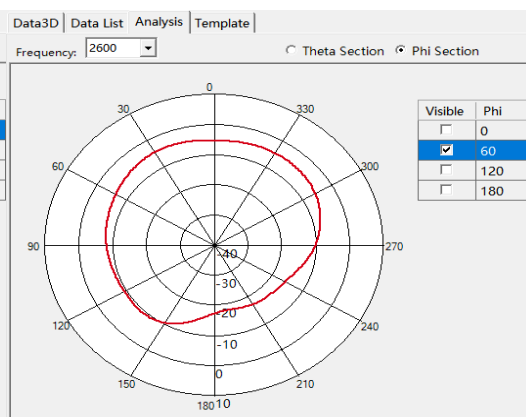
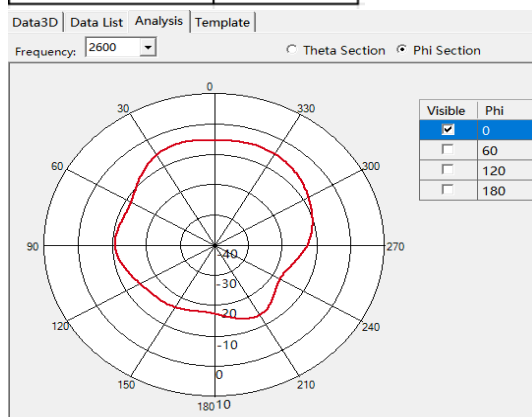


Frequency band	Gain
B40	-1



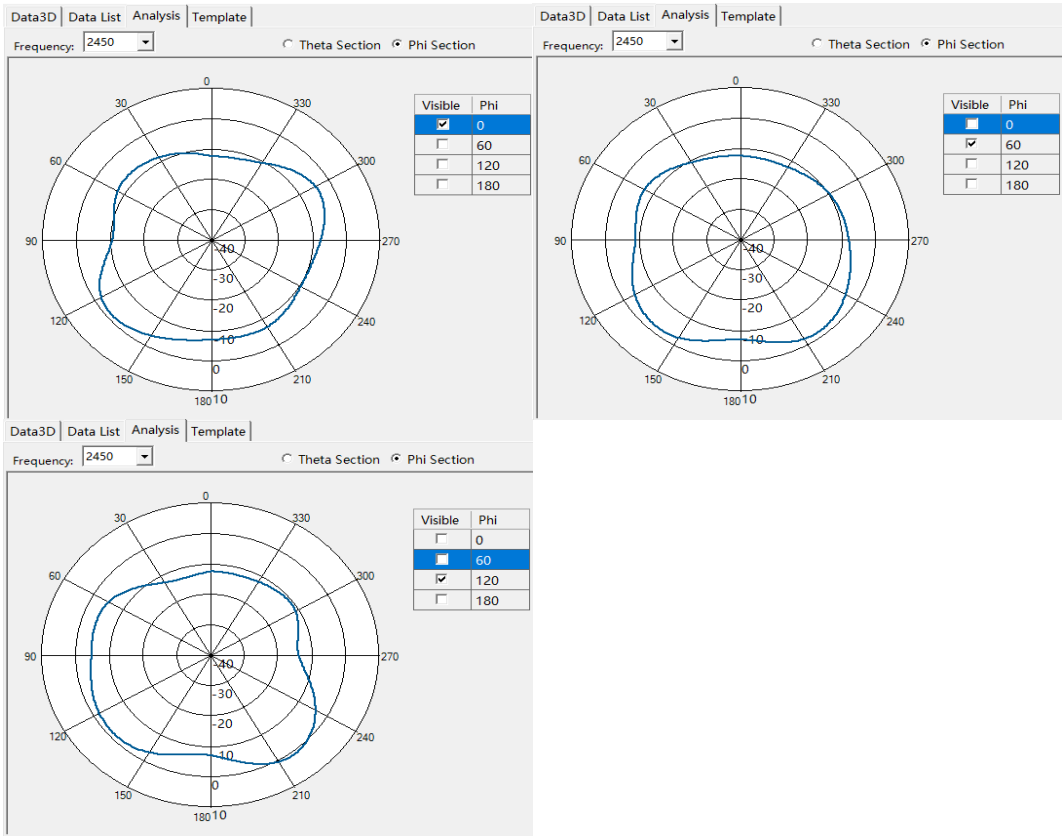


Frequency band	Gain
B41	-0.2

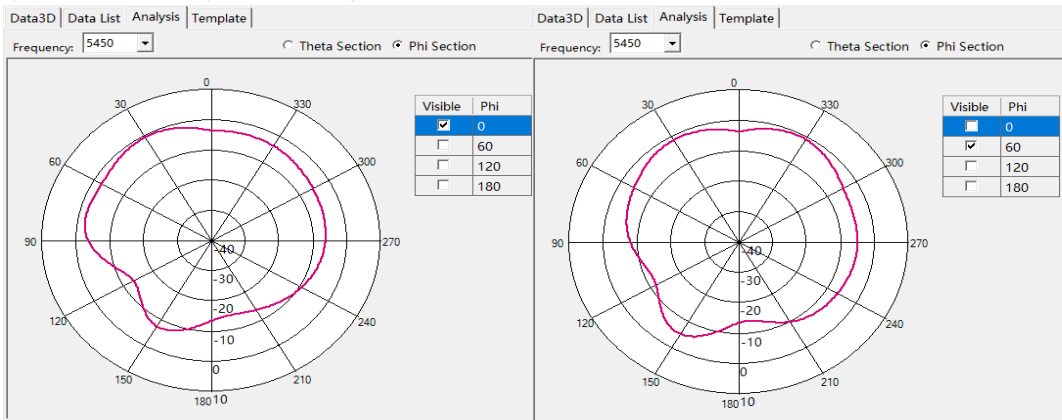


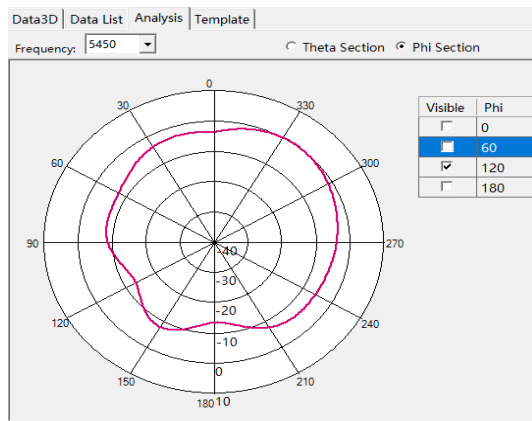
ANT6

Frequency band	Gain
WIFI-2.4G	-0.34

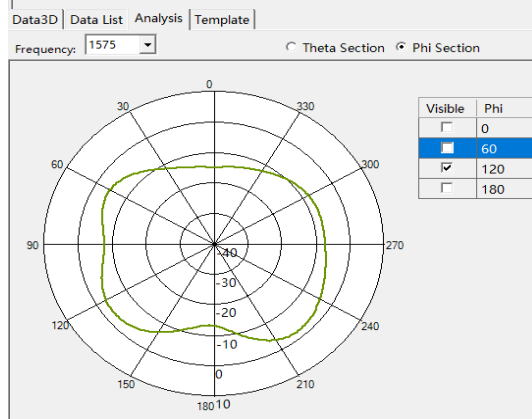
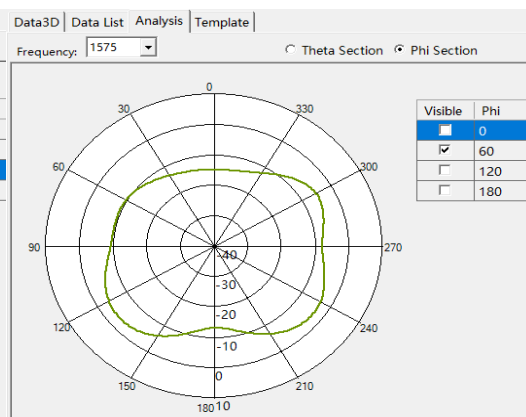
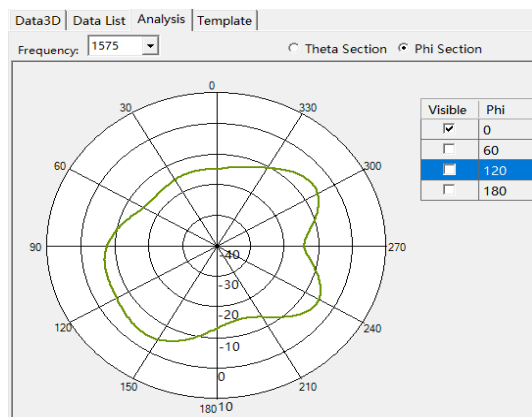


Frequency band	Gain
WIFI-5G	-0.73



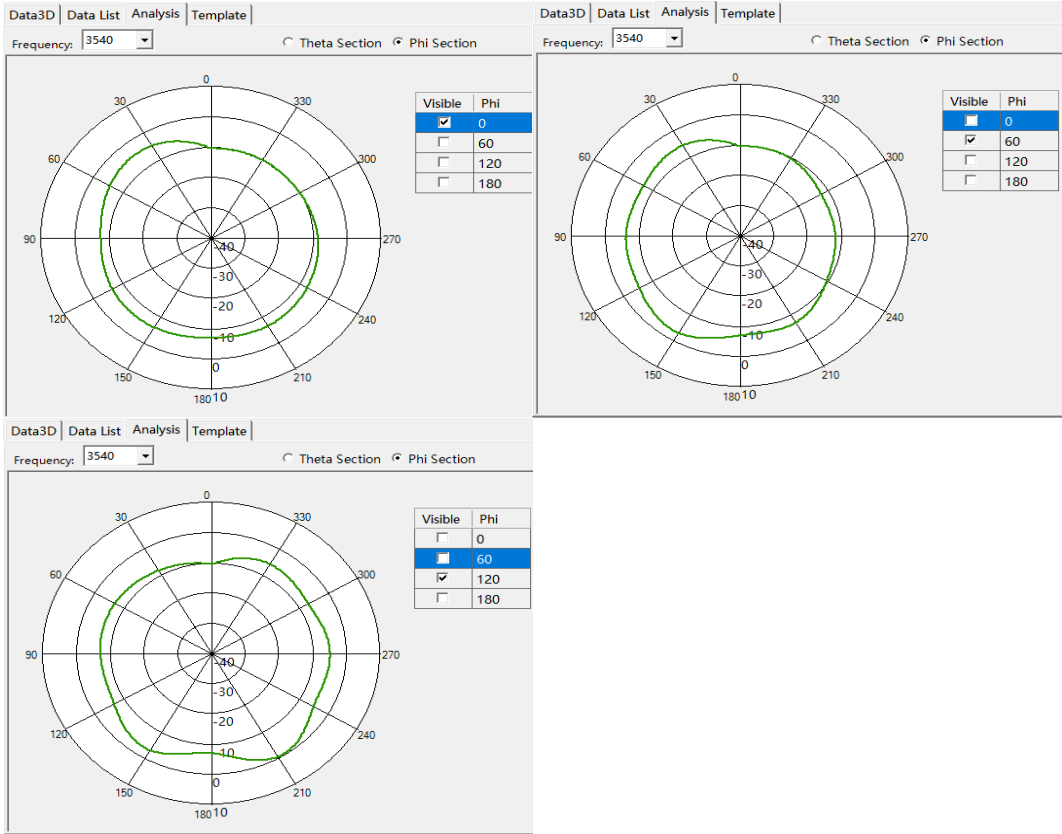


Frequency band	Gain
GPS	-1.94



ANT5

Frequency band	Gain
N78	1.7



Frequency band	Gain
N77	0.17

